



SEQUENCE LISTING

<10> Taupier Jr., Raymond J
Majmuder, Kamud
Spaderna, Steven K
Smithson, Glenda
Mezes, Peter S
Vernet, Corine A. M.

<120> Novel Polypeptides and Amino Acids Encoding Same

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<141> 2001-03-20

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<170> PatentIn Ver. 2.1

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Gly Ile Cys Leu Phe Ser Gln Arg Phe Leu Met Ile Leu Trp Leu Lys
35 40 45

Gly Val Val Phe Ser Val Thr Thr Val Asp Leu Lys Arg Lys Pro Ala
50 55 60

Asp Leu Gln Asn Lys Ala Pro Gly Asn His Pro Pro Leu Ile Thr Ser
65 70 75 80

Thr Val Lys Ser Asn Lys Ile Glu Glu Ala Pro Glu Glu Val Leu Cys

85

90

95

Pro Pro Lys Tyr Leu Lys Leu Ser Pro Lys His Pro Glu Ser Asn Thr
 100 105 110

Ala Gly Met Asp Ile Phe Ala Lys Phe Ser Ala Tyr Ile Lys Asn Ser
 115 120 125

Arg Pro Glu Val Asn Glu Ala Leu Val Lys His Leu Leu Lys Thr Leu
 130 135 140

Gln Lys Met Glu Tyr Leu Asn Ser Pro Leu Pro Asp Glu Ile Asp Glu
 145 150 155 160

Asn Ser Met Gln Asp Thr Lys Phe Ser Thr His Lys Phe Leu Asn Gly
 165 170 175

Asn Lys Met Ala Leu Ala Asp Cys His Leu Leu Pro Lys Leu His Ile
 180 185 190

Val Lys Lys Lys Glu Lys Tyr Arg Lys Tyr Lys Asn Ile Glu Lys Lys
 195 200 205

Gly Met Thr Gly Ile Trp Arg Tyr Leu Thr Asn Thr Ser Ser Arg Asp
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Glu Thr Val Asn Val Val
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Leu Thr Pro Thr Met Asp Thr Val Gln Gln Leu Glu Glu Arg Gly His
35 40 45

Leu Met Asp Ser Lys Gly Phe Asp Glu Asn Lys Tyr Met Lys Glu Leu
50 55 60

Gly Val Gly Leu Ala Leu Cys Glu Lys Lys Gly Ala Met Ala Lys Lys
65 70 75 80

Asp Cys Ile Ser Phe Phe Asp Gly Lys Asn Leu Thr Ile Lys Met Glu
85 90 95

Ser Thr Leu Lys Ser Tyr Ser Phe Leu Thr Leu Arg Gly Gly Lys Phe
100 105 110

Lys Glu Thr Thr Gly Asp Gly Arg Lys Thr Gln Thr Cys Thr Phe Thr
115 120 125

Tyr Gly Thr Leu Val Arg His Gln Lys Trp Asn Gly Lys Glu Gly Lys
130 135 140

Ile Arg Lys Leu Lys Asp Arg Lys Leu Val Val Asp Cys Ile Ile Asn
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Asn Val Thr Cys Thr Gln Ile Tyr Glu Lys Val Glu
165 170

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<211> 304

<212> PRT

<213> Homo sapiens

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20 25 30

Ser Pro Gly Pro Asp Tyr Leu Arg Arg Gly Trp Met Arg Leu Leu Ala
35 40 45

Glu Gly Glu Gly Cys Ala Pro Cys Arg Pro Glu Glu Cys Ala Ala Pro
50 55 60

Arg Gly Cys Leu Ala Gly Arg Val Arg Asp Ala Cys Gly Cys Cys Trp
65 70 75 80

Glu Cys Ala Asn Leu Glu Gly Gln Leu Cys Asp Leu Asp Pro Ser Ala
85 90 95

His Phe Tyr Gly His Cys Gly Glu Gln Leu Glu Cys Arg Leu Asp Thr
100 105 110

Gly Gly Asp Leu Ser Arg Gly Glu Val Pro Glu Pro Leu Cys Ala Cys
115 120 125

Arg Ser Gln Ser Pro Leu Cys Gly Ser Asp Gly His Thr Tyr Ser Gln
 130 135 140

 Ile Cys Arg Leu Gln Glu Ala Ala Arg Ala Arg Pro Asp Ala Asn Leu
 145 150 155 160

 Thr Val Ala His Pro Gly Pro Cys Glu Ser Gly Pro Gln Ile Val Ser
 165 170 175

 His Pro Tyr Asp Thr Trp Asn Val Thr Gly Gln Asp Val Ile Phe Gly
 180 185 190

 Cys Glu Val Phe Ala Tyr Pro Met Ala Ser Ile Glu Trp Arg Lys Asp
 195 200 205

 Gly Leu Asp Ile Gln Leu Pro Gly Asp Asp Pro His Ile Ser Val Gln
 210 215 220

 Phe Arg Gly Gly Pro Gln Arg Phe Glu Val Thr Gly Trp Leu Gln Ile
 225 230 235 240

 Gln Ala Val Arg Pro Ser Asp Glu Gly Thr Tyr Arg Cys Leu Gly Arg
 245 250 255

 Asn Ala Leu Gly Gln Val Glu Ala Pro Ala Ser Leu Thr Val Leu Thr
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Gly Ser Val Gln Pro Pro Ser Tyr Gly Thr Trp Pro Val Ser Ser Ala
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Ala Ser Ile Tyr Ala Gly Thr Gly Gly Leu Gly Ser Gln Ile Ser Met
 35 40 45

Ser Cys Ser Thr Ser Phe Trp Gly Gly Leu Gly Ser Gly Gly Leu Ala
 50 55 60

Thr Glu Met Ala Gly Gly Leu Ala Glu Met Gly Gly Ile Gln Asn Glu
 65 70 75 80

Lys Glu Thr Met Gln Ser Leu Asn Asp His Leu Asp Tyr Leu Asp Arg
 85 90 95

Val Arg Asn Leu Glu Thr Glu Asn Trp Arg Leu Glu Ser Lys Ile Gln
 100 105 110

Glu Tyr Leu Glu Lys Arg Pro His Val Arg Asp Trp Gly His Tyr Phe

115	120	125
Lys Thr Ile Lys Glu Leu Arg Ala Gln Ile Phe Ala Asn Thr Val Asp		
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Asn Val His Ile Ile Leu Gln Ile Asp Asn Ala Arg Leu Ala Ala Asp		
145	150	155
Asp Phe Arg Val Lys Tyr Glu Thr Glu Leu Ala Met Arg Gln Ser Val		
165	170	175
Glu Ser Asn Ile His Gly Leu Cys Lys Val Ile Asp Asp Thr Asn Val		
180	185	190
Thr Leu Leu Gln Leu Glu Thr Glu Met Gly Ala Leu Lys Glu Glu Leu		
195	200	205
Leu Leu Met Lys Lys Asn His Glu Glu Glu Val Lys Gly Leu Gln Val		
210	215	220
Gln Ile Ala Asn Ser Gly Leu Ala Val Glu Val Asp Ala Pro Lys Ser		
225	230	235
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Gln Val Leu Ala Lys Val Met Ala Asp Ile Arg Ala Gln Tyr Asp Glu		
245	250	255
Leu Ser Gln Lys Asn Ser Glu Lys Leu Gly Lys Tyr Trp Ser Gln Gln		
260	265	270
Thr Glu Glu Ser Thr Thr Val Val Thr Thr His Ser Ala Lys Val Arg		
275	280	285
Ala Ala Glu Met Thr Thr Glu Leu Arg Arg Thr Val Gln Cys Leu Glu		
290	295	300
Ile Asp Leu Asp Ser Met Arg Asn Leu Lys Thr Ser Leu Glu Asn Ser		
305	310	315
320		
Leu Arg Glu Val Glu Ala Arg Tyr Ala Leu Gln Met Glu Gln Leu Asn		
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Arg Ile Leu Leu Tyr Leu Glu Ser Lys Leu Ala Gln Asn Trp Ala Glu		
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Gly Gln Arg Lys Val Gln Glu Tyr Lys Asp Leu Leu Asn Ile Arg Val		
355	360	365
Lys Leu Glu Ala Glu Ile Ala Thr Tyr Arg Arg Leu Leu Glu Asp Ser		

370

375

380

Glu Gly Leu Asn Leu Gly Asp Ala Leu Asp Ser Ser Asn Ser Met Gln
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Ser Glu Ile Ser Asp Thr Lys Val Leu Arg His
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<212> DNA
<213> Homo sapiens

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<211> 733
<212> PRT
<213> Homo sapiens

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20 25 30

Gly Thr Thr Lys Val Pro Gly Ser Thr Pro Ala Leu His Ser Ser Pro
35 40 45

Ala Gln Pro Ser Ala Glu Thr Ala Asn Thr Ser Glu Gln His Val Arg
50 55 60

Ile Arg Val Ile Lys Lys Lys Val Ile Met Lys Lys Arg Lys Lys
65 70 75 80

Leu Thr Leu Thr Arg Pro Thr Pro Leu Val Thr Ala Gly Pro Leu Val
85 90 95

Thr Pro Thr Pro Ala Gly Thr Leu Asp Pro Ala Glu Lys Gln Glu Pro
100 105 110

Gly Cys Pro Pro Leu Gly Leu Glu Ser Leu Arg Val Ser Asp Ser Arg
115 120 125

Leu Glu Ala Ser Ser Ser Gln Ser Phe Gly Leu Gly Pro His Arg Gly
130 135 140

Arg Leu Asn Ile Gln Ser Gly Leu Glu Asp Gly Asp Leu Tyr Asp Gly
145 150 155 160

Ala Trp Cys Ala Glu Glu Gln Asp Ala Asp Pro Trp Phe Gln Val Asp
165 170 175

Ala Gly His Pro Thr Arg Phe Ser Gly Val Ile Thr Gln Gly Arg Asn
180 185 190

Ser Val Trp Arg Tyr Asp Trp Val Thr Ser Tyr Lys Val Gln Phe Ser
195 200 205

Asn Asp Ser Arg Thr Trp Trp Gly Ser Arg Asn His Ser Ser Gly Met
210 215 220

Asp Ala Val Phe Pro Ala Asn Ser Asp Pro Glu Thr Pro Val Leu Asn
225 230 235 240

Leu Leu Pro Glu Pro Gln Val Ala Arg Phe Ile Arg Leu Leu Pro Gln
245 250 255

Thr Trp Leu Gln Gly Gly Ala Pro Cys Leu Arg Ala Glu Ile Leu Ala
260 265 270

Cys Pro Val Ser Asp Pro Asn Asp Leu Phe Leu Glu Ala Pro Ala Ser
275 280 285

Gly Ser Ser Asp Pro Leu Asp Phe Gln His His Asn Tyr Lys Ala Met
290 295 300

Arg Lys Leu Met Lys Gln Val Gln Glu Gln Cys Pro Asn Ile Thr Arg
305 310 315 320

Ile Tyr Ser Ile Gly Lys Ser Tyr Gln Gly Leu Lys Leu Tyr Val Met
325 330 335

Glu Met Ser Asp Lys Pro Gly Glu His Glu Leu Gly Glu Pro Glu Val
340 345 350

Arg Tyr Val Ala Gly Met His Gly Asn Glu Ala Leu Gly Arg Glu Leu
355 360 365

Leu Leu Leu Met Gln Phe Leu Cys His Glu Phe Leu Arg Gly Asn
370 375 380

Pro Arg Val Thr Arg Leu Leu Ser Glu Met Arg Ile His Leu Leu Pro
385 390 395 400

Ser Met Asn Pro Asp Gly Tyr Glu Ile Ala Tyr His Arg Gly Ser Glu
405 410 415

Leu Val Gly Trp Ala Glu Gly Arg Trp Asn Asn Gln Ser Ile Asp Leu
420 425 430

Asn His Asn Phe Ala Asp Leu Asn Thr Pro Leu Trp Glu Ala Gln Asp
435 440 445

Asp Gly Lys Val Pro His Ile Val Pro Asn His His Leu Pro Leu Pro
450 455 460

Thr Tyr Tyr Thr Leu Pro Asn Ala Thr Val Ala Pro Glu Thr Arg Ala
465 470 475 480

Val Ile Lys Trp Met Lys Arg Ile Pro Phe Val Leu Ser Ala Asn Leu
485 490 495

His Gly Gly Glu Leu Val Val Ser Tyr Pro Phe Asp Met Thr Arg Thr
500 505 510

Pro Trp Ala Ala Arg Glu Leu Thr Pro Thr Pro Asp Asp Ala Val Phe
515 520 525

Arg Trp Leu Ser Thr Val Tyr Ala Gly Ser Asn Leu Ala Met Gln Asp
530 535 540

Thr Ser Arg Arg Pro Cys His Ser Gln Asp Phe Ser Val His Gly Asn
545 550 555 560

Ile Ile Asn Gly Ala Asp Trp His Thr Val Pro Gly Ser Met Asn Asp
565 570 575

Phe Ser Tyr Leu His Thr Asn Cys Phe Glu Val Thr Val Glu Leu Ser
580 585 590

Cys Asp Lys Phe Pro His Glu Asn Glu Leu Pro Gln Glu Trp Glu Asn
595 600 605

Asn Lys Asp Ala Leu Leu Thr Tyr Leu Glu Gln Val Arg Met Gly Ile
610 615 620

Ala Gly Val Val Arg Asp Lys Asp Thr Glu Leu Gly Ile Ala Asp Ala
625 630 635 640

Val Ile Ala Val Asp Gly Ile Asn His Asp Val Thr Thr Ala Trp Gly
645 650 655

Gly Asp Tyr Trp Arg Leu Leu Thr Pro Gly Asp Tyr Met Val Thr Ala
660 665 670

Ser Ala Glu Gly Tyr His Ser Val Thr Arg Asn Cys Arg Val Thr Leu
675 680 685

Lys Arg Gly Pro Phe Pro Cys Asn Phe Val Leu Thr Lys Thr Pro Lys
690 695 700

Gln Arg Leu Arg Glu Leu Leu Ala Ala Gly Ala Lys Val Pro Pro Asp
705 710 715 720

Leu Arg Arg Arg Leu Glu Arg Leu Arg Gly Gln Lys Asp
725 730

<210> 11

<211> 846

<212> DNA

<213> Homo sapiens

<400> 11

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<210> 12

<211> 278

<212> PRT

<213> Homo sapiens

<400> 12

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20 25 30

Gly Gly His Asn Ala Pro Pro Gly Lys Trp Pro Trp Gln Val Ser Leu
35 40 45

Arg Val Tyr Ser Tyr His Trp Ala Ser Trp Ala His Ile Cys Gly Gly
 50 55 60

Ser Leu Ile His Pro Gln Trp Val Leu Thr Ala Ala His Cys Ile Phe
 65 70 75 80

Trp Lys Asp Thr Asp Pro Ser Ile Tyr Arg Ile His Ala Gly Asp Val
 85 90 95

Tyr Leu Tyr Gly Gly Arg Gly Leu Leu Asn Val Ser Arg Ile Ile Val
 100 105 110

His Pro Asn Tyr Val Thr Ala Gly Leu Gly Ala Asp Val Ala Leu Leu
 115 120 125

Gln Leu Val Ser Pro Met Ile Gly Ala Ala Asn Val Arg Thr Val Lys
 130 135 140

Leu Ser Pro Val Ser Leu Glu Leu Thr Pro Lys Asp Gln Cys Trp Val
 145 150 155 160

Thr Gly Trp Gly Ala Ile Arg Met Phe Glu Ser Leu Pro Pro Pro Tyr
 165 170 175

Arg Leu Gln Gln Ala Ser Val Gln Val Leu Glu Asn Ala Val Cys Glu
 180 185 190

Gln Pro Tyr Arg Asn Ala Ser Gly His Thr Gly Asp Arg Gln Leu Ile
 195 200 205

Leu Asp Asp Met Leu Cys Ala Gly Ser Glu Gly Arg Asp Ser Cys Gln
 210 215 220

Gly Asp Ser Gly Gly Pro Leu Val Cys Arg Leu Arg Gly Ser Trp Arg
 225 230 235 240

Leu Val Gly Val Val Ser Trp Gly Tyr Gly Cys Thr Leu Arg Asp Phe
 245 250 255

Pro Gly Val Tyr Thr His Val Gln Ile Tyr Val Leu Trp Ile Leu Gln
 260 265 270

Gln Val Gly Glu Leu Pro
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<210> 13
 <211> 2145

<212> DNA

<213> Homo sapiens

<400> 13

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cgctggctgc gtcagttaccg cccgcgggag tacctggcag ggcacgtcat gtctgggtc 300
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<210> 14

<211> 633

<212> PRT

<213> Homo sapiens

<400> 14

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Val Arg Arg Gln Arg Pro Ala Pro Arg Gly Leu Arg Glu Met Leu Lys
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Ala Arg Leu Trp Cys Ser Cys Ser Cys Val Leu Cys Val Arg Ala
35 40 45

Leu Val Gln Asp Leu Leu Pro Ala Thr Arg Trp Leu Arg Gln Tyr Arg
50 55 60

Pro Arg Glu Tyr Leu Ala Gly Asp Val Met Ser Gly Leu Val Ile Gly
65 70 75 80

Ile Ile Leu Val Pro Gln Ala Ile Ala Tyr Ser Leu Leu Ala Gly Leu
85 90 95

Gln Pro Ile Tyr Ser Leu Tyr Thr Ser Phe Phe Ala Asn Leu Ile Tyr
100 105 110

Phe Leu Met Gly Thr Ser Arg His Val Ser Val Gly Ile Phe Ser Leu
115 120 125

Leu Cys Leu Met Val Gly Gln Val Val Asp Arg Glu Leu Gln Leu Ala
130 135 140

Gly Phe Asp Pro Ser Gln Asp Gly Leu Gln Pro Gly Ala Asn Ser Ser
145 150 155 160

Thr Leu Asn Gly Ser Ala Ala Met Leu Asp Cys Gly Arg Asp Cys Tyr
165 170 175

Ala Ile Arg Val Ala Thr Ala Leu Thr Leu Met Thr Gly Leu Tyr Gln
180 185 190

Val Leu Met Gly Val Leu Arg Leu Gly Phe Val Ser Ala Tyr Leu Ser
195 200 205

Gln Pro Leu Leu Asp Gly Phe Ala Met Gly Ala Ser Val Thr Ile Leu
210 215 220

Thr Ser Gln Leu Lys His Leu Leu Gly Val Arg Ile Pro Arg His Gln
225 230 235 240

Gly Pro Gly Met Val Val Leu Thr Trp Leu Ser Leu Leu Arg Gly Ala
245 250 255

Gly Gln Ala Asn Val Cys Asp Val Val Thr Ser Thr Val Cys Leu Ala
260 265 270

Val Leu Leu Ala Ala Lys Glu Leu Ser Asp Arg Tyr Arg His Arg Leu
275 280 285

Arg Val Pro Leu Pro Thr Glu Leu Leu Val Ile Val Val Ala Thr Leu
290 295 300

Val Ser His Phe Gly Gln Leu His Lys Arg Phe Gly Ser Ser Val Ala
305 310 315 320

Gly Asp Ile Pro Thr Gly Phe Met Pro Pro Gln Val Pro Glu Pro Arg
325 330 335

Leu Met Gln Arg Val Ala Leu Asp Ala Val Ala Leu Ala Leu Val Ala
340 345 350

Ala Ala Phe Ser Ile Ser Leu Ala Glu Met Phe Ala Arg Ser His Gly
355 360 365

Tyr Ser Val Arg Ala Asn Gln Glu Leu Leu Ala Val His Arg Gly His
370 375 380

Leu Arg Gly Ala Cys Gln Gly Val Gly Leu Pro Gly Cys Gly Ser
385 390 395 400

Pro Ala Asp Ala Leu Val Trp Ala Gly Thr Gly Thr Cys Met Leu Val
405 410 415

Ser Thr Glu Ala Gly Leu Leu Ala Gly Val Ile Leu Ser Leu Leu Ser
420 425 430

Leu Ala Gly Arg Thr Gln Lys Pro Arg Thr Ala Leu Leu Ala Arg Ile
435 440 445

Gly Asp Thr Ala Phe Tyr Glu Asp Ala Thr Glu Phe Glu Gly Leu Val
450 455 460

Pro Glu Pro Gly Val Arg Val Phe Arg Phe Gly Gly Pro Leu Tyr Tyr
465 470 475 480

Ala Asn Lys Asp Phe Phe Leu Gln Ser Leu Tyr Ser Leu Thr Gly Leu
485 490 495

Asp Ala Gly Cys Met Ala Ala Arg Arg Lys Glu Gly Ser Glu Thr
500 505 510

Gly Val Gly Glu Gly Gly Pro Ala Gln Gly Glu Asp Leu Gly Pro Val
515 520 525

Ser Thr Arg Ala Ala Leu Val Pro Ala Ala Ala Gly Phe His Thr Val
530 535 540

Val Ile Asp Cys Ala Pro Leu Leu Phe Leu Asp Ala Ala Gly Val Ser
545 550 555 560

Thr Leu Gln Asp Leu Arg Arg Asp Tyr Gly Ala Leu Gly Ile Ser Leu
565 570 575

Leu Leu Ala Cys Cys Ser Pro Pro Val Arg Asp Ile Leu Ser Arg Gly
580 585 590

Gly Phe Leu Gly Glu Gly Pro Gly Asp Thr Ala Glu Glu Gln Leu
595 600 605

Phe Leu Ser Val His Asp Ala Val Gln Thr Ala Arg Ala Arg His Arg
610 615 620

Glu Leu Glu Ala Thr Asp Ala His Leu
625 630

<210> 15

<211> 406

<212> DNA

<213> Homo sapiens

<400> 15

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aagtttgttg ttatgtctgga cagagacaaa ctcattcaca tacagaaatg ggatgacaaa 300
gaaaacatatt ttataagaga aattaagtat ggtgaaatgg ttatgacctt tacttttgtt 360
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<210> 16

<211> 132

<212> PRT

<213> Homo sapiens

<400> 16

Val Glu Glu Ala Phe Cys Asn Thr Trp Lys Leu Thr Asp Gln Asn Phe
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Asp Glu Tyr Met Lys Ala Leu Gly Met Gly Phe Val Thr Arg Gln Val
20 25 30

Gly Asn Val Asp Lys Pro Arg Val Ile Ile Ser Gln Glu Glu Asp Lys
35 40 45

Val Val Ile Arg Ile Gln Ser Met Phe Lys Asn Thr Glu Val Ser Phe
50 55 60

His Leu Gly Glu Glu Phe Asp Glu Thr Thr Asp Asp Arg Asn Cys
65 70 75 80

Lys Phe Val Val Ser Leu Asp Arg Asp Lys Leu Ile His Ile Gln Lys
85 90 95

Trp Asp Asp Lys Glu Thr Tyr Phe Ile Arg Glu Ile Lys Tyr Gly Glu
100 105 110

Met Val Met Thr Phe Thr Phe Gly Asp Asp Val Val Ala Val His His
115 120 125

Tyr Lys Lys Ala
130

<210> 17

<211> 418

<212> DNA

<213> Homo sapiens

<400> 17

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aaaccaagag tgattatcg tcaagaagaa gacaaggtagg tgatcaggat tcaaagtatg 180
ttcaagaaca cagaggtagg tttccatctg ggagaagagt ttgatgaaac cactacagat 240
gacagaaaact gcaaggtagg tgtagtctg gacagagaca aactcattca catacagaaa 300
tgggatgaca aagaaacata ttttataaga gaaattaagt atggtaaat ggtagtgcacc 360
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<210> 18

<211> 135

<212> PRT

<213> Homo sapiens

<400> 18

Met Val Arg Val Glu Glu Ala Phe Cys Asn Thr Trp Lys Leu Thr Asp

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5

10

15

Gln Asn Phe Asp Glu Tyr Met Lys Ala Leu Gly Met Gly Phe Val Thr
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Arg Gln Val Gly Asn Val Asp Lys Pro Arg Val Ile Ile Ser Gln Glu
 35 40 45

Glu Asp Lys Val Val Ile Arg Ile Gln Ser Met Phe Lys Asn Thr Glu
 50 55 60

Val Ser Phe His Leu Gly Glu Glu Phe Asp Glu Thr Thr Thr Asp Asp
 65 70 75 80

Arg Asn Cys Lys Phe Val Val Ser Leu Asp Arg Asp Lys Leu Ile His
 85 90 95

Ile Gln Lys Trp Asp Asp Lys Glu Thr Tyr Phe Ile Arg Glu Ile Lys
 100 105 110

Tyr Gly Glu Met Val Met Thr Phe Thr Phe Gly Asp Asp Val Val Ala
 115 120 125

Val His His Tyr Lys Lys Ala
 130 135

<210> 19
 <211> 1119
 <212> DNA
 <213> Homo sapiens

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 ttaccagcaa atatcttgcgt ggtggcaag aagacagaag 180
 tcctccata actatcttgcgt gctggccaca tcttggctt cttttcata 240
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<210> 20
<211> 372
<212> PRT
<213> Homo sapiens

<400> 20
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Trp Ser Pro Gly Ser Ala Cys Gly Leu Gly Phe Val Pro Val Val Tyr
20 25 30

Tyr Ser Leu Leu Cys Leu Gly Leu Pro Ala Asn Ile Leu Thr Val
35 40 45

Ile Ile Leu Ser Gln Leu Val Ala Arg Arg Gln Lys Ser Ser Tyr Asn
50 55 60

Tyr Leu Leu Ala Leu Ala Ala Asp Ile Leu Val Leu Phe Phe Ile
65 70 75 80

Val Phe Val Asp Phe Leu Leu Glu Asp Phe Ile Leu Asn Met Gln Met
85 90 95

Pro Gln Val Pro Asp Lys Ile Ile Glu Val Leu Glu Phe Ser Ser Ile
100 105 110

His Thr Ser Ile Trp Ile Thr Val Pro Leu Thr Ile Asp Arg Tyr Ile
115 120 125

Ala Val Cys His Pro Leu Lys Tyr His Thr Val Ser Tyr Pro Ala Arg
130 135 140

Thr Arg Lys Val Ile Val Ser Val Tyr Ile Thr Cys Phe Leu Thr Ser
145 150 155 160

Ile Pro Tyr Tyr Trp Trp Pro Asn Ile Trp Thr Glu Asp Tyr Ile Ser
165 170 175

Thr Ser Val His His Val Leu Ile Trp Ile His Cys Phe Thr Val Tyr
180 185 190

Leu	Val	Pro	Cys	Ser	Ile	Phe	Phe	Ile	Leu	Asn	Ser	Ile	Ile	Val	Tyr
195															
						200								205	
Lys	Leu	Arg	Arg	Lys	Ser	Asn	Phe	Arg	Leu	Arg	Gly	Tyr	Ser	Thr	Gly
210															
				215										220	
Lys	Thr	Thr	Ala	Ile	Leu	Phe	Thr	Ile	Thr	Ser	Ile	Phe	Ala	Thr	Leu
225															240
				230					235						
Trp	Ala	Pro	Arg	Ile	Ile	Met	Ile	Leu	Tyr	His	Leu	Tyr	Gly	Ala	Pro
245							250							255	
Ile	Gln	Asn	Arg	Trp	Leu	Val	His	Ile	Met	Ser	Asp	Ile	Ala	Asn	Met
260							265							270	
Leu	Ala	Leu	Leu	Asn	Thr	Ala	Ile	Asn	Phe	Phe	Leu	Tyr	Cys	Phe	Ile
275					280							285			
Ser	Lys	Arg	Phe	Arg	Thr	Met	Ala	Ala	Ala	Thr	Leu	Lys	Ala	Phe	Phe
290					295					300					
Lys	Cys	Gln	Lys	Gln	Pro	Val	Gln	Phe	Tyr	Thr	Asn	His	Asn	Phe	Ser
305					310				315					320	
Ile	Thr	Ser	Ser	Pro	Trp	Ile	Ser	Pro	Ala	Asn	Ser	His	Cys	Ile	Lys
325					330									335	
Met	Leu	Val	Tyr	Gln	Tyr	Asp	Lys	Asn	Gly	Lys	Pro	Ile	Lys	Ser	Arg
340					345									350	
Asn	Asp	Ser	Lys	Ser	Ser	Tyr	Gln	Phe	Glu	Asp	Ala	Ile	Gly	Ala	Cys
355					360							365			
Val	Ile	Ile	Leu												
370															

<210> 21

<211> 1343

<212> DNA

<213> Homo sapiens

<400> 21

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<210> 22
<211> 353
<212> PRT
<213> Homo sapiens

<400> 22
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Trp Ser Pro Gly Ser Ala Cys Gly Leu Gly Phe Val Pro Val Val Tyr
20 25 30

Tyr Ser Leu Leu Leu Cys Leu Gly Leu Pro Ala Asn Ile Leu Thr Val
35 40 45

Ile Ile Leu Ser Gln Leu Val Ala Arg Arg Gln Lys Ser Ser Tyr Asn
50 55 60

Tyr Leu Leu Ala Leu Ala Ala Asp Ile Leu Val Leu Phe Phe Ile
65 70 75 80

Val Phe Val Asp Phe Leu Leu Glu Asp Phe Ile Leu Asn Met Gln Met
85 90 95

Pro Gln Val Pro Asp Lys Ile Ile Glu Val Leu Glu Phe Ser Ser Ile
100 105 110

His Thr Ser Ile Trp Ile Thr Val Pro Leu Thr Ile Asp Arg Tyr Ile

115	120	125
Thr Val Cys His Pro Leu Lys Tyr His Thr Val Ser Tyr Pro Ala Arg		
130	135	140
Thr Arg Lys Val Ile Val Ser Val Tyr Ile Thr Cys Phe Leu Thr Ser		
145	150	155
Ile Pro Tyr Tyr Trp Trp Pro Asn Ile Trp Thr Glu Asp Tyr Ile Ser		
165	170	175
Thr Ser Val His His Val Leu Ile Trp Ile His Cys Phe Thr Val Tyr		
180	185	190
Leu Val Pro Cys Ser Ile Phe Phe Leu Asn Ser Ile Ile Val Tyr		
195	200	205
Lys Leu Arg Arg Lys Ser Asn Phe Arg Leu Arg Gly Tyr Ser Thr Gly		
210	215	220
Lys Thr Thr Ala Ile Leu Phe Thr Ile Thr Ser Ile Phe Ala Thr Leu		
225	230	235
240		
Trp Ala Pro Arg Ile Ile Met Ile Leu Tyr His Leu Tyr Gly Ala Pro		
245	250	255
Ile Gln Asn Arg Trp Leu Val His Ile Met Ser Asp Ile Ala Asn Met		
260	265	270
Leu Ala Leu Leu Asn Thr Ala Ile Asn Phe Phe Leu Tyr Cys Phe Ile		
275	280	285
Ser Lys Arg Phe Arg Thr Met Ala Ala Ala Thr Leu Lys Ala Phe Phe		
290	295	300
Lys Cys Gln Lys Gln Pro Val Gln Phe Tyr Thr Asn His Asn Phe Ser		
305	310	315
320		
Ile Thr Ser Ser Pro Trp Ile Ser Pro Ala Asn Ser His Cys Ile Lys		
325	330	335
Met Leu Val Tyr Gln Tyr Asp Lys Asn Gly Lys Pro Ile Lys Val Ser		
340	345	350
Pro		

<210> 23
<211> 2392
<212> DNA
<213> Homo sapiens

<400> 23

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ccggaaatct ctgatcgtgt tcatggagca gtttcatctg ggcattaaag gcttggtgag 1860
agattcacat ggaaaaggaa tcccaaacgc cattatctcc gtagaaggca ttaaccatga 1920
catccgaaca gccaacgatg gggattactg gcgcctctg aaccctggag agtatgtgg 1980
cacagcaaag gccgaagggtt tcactgcattc caccaagaac tgtatggtg gctatgacat 2040
ggggggccaca aggtgtgact tcacacttag caaaaccaac atggccagga tccgagagat 2100
catggagaag tttgggaagc agcccgtcag cttgcgcagcc aggcggctga agctgcgggg 2160
gcggaaagaga cgacagcgtg ggtgaccctc ctggggccctt gagactcgtc tgggaccat 2220
gcaaattaaa ccaacctggt agtagctcca tagtggactc actcaactttt gtttcctctg 2280
taattcaaga agtgcctgga agagagggtg cattgtgagg caggtcccaa aagggaaggc 2340
tggaggctga ggctgttttc ttttcttgc tcccatattt ccaaataact tg 2392

<210> 24
<211> 650
<212> PRT
<213> Homo sapiens

<400> 24
Met Arg Thr Lys Ser Ser Glu Lys Ala Ala Asn Asp Asp His Ser Val
1 5 10 15

Arg Val Ala Arg Glu Asp Val Arg Glu Ser Cys Pro Pro Leu Gly Leu
20 25 30

Glu Thr Leu Lys Ile Thr Asp Phe Gln Leu His Ala Ser Thr Val Lys
35 40 45

Arg Tyr Gly Leu Gly Ala His Arg Gly Arg Leu Asn Ile Gln Ala Gly
50 55 60

Ile Asn Glu Asn Asp Phe Tyr Asp Gly Ala Trp Cys Ala Gly Arg Asn
65 70 75 80

Asp Leu Gln Gln Trp Ile Glu Val Asp Ala Arg Arg Leu Thr Arg Phe
85 90 95

Thr Gly Val Ile Thr Gln Gly Arg Asn Ser Leu Trp Leu Ser Asp Trp
100 105 110

Val Thr Ser Tyr Lys Val Met Val Ser Asn Asp Ser His Thr Trp Val
115 120 125

Thr Val Lys Asn Gly Ser Gly Asp Met Ile Phe Glu Gly Asn Ser Glu
130 135 140

Lys Glu Ile Pro Val Leu Asn Glu Leu Pro Val Pro Met Val Ala Arg
145 150 155 160

Tyr Ile Arg Ile Asn Pro Gln Ser Trp Phe Asp Asn Gly Ser Ile Cys
165 170 175

Met Arg Met Glu Ile Leu Gly Cys Pro Leu Pro Asp Pro Asn Asn Tyr
180 185 190

Tyr His Arg Arg Asn Glu Met Thr Thr Asp Asp Leu Asp Phe Lys
195 200 205

His His Asn Tyr Lys Glu Met Arg Gln Val Gln Leu Met Lys Val Val
210 215 220

Asn	Glu	Met	Cys	Pro	Asn	Ile	Thr	Arg	Ile	Tyr	Asn	Ile	Gly	Lys	Ser
225															240
His Gln Gly Leu Lys Leu Tyr Ala Val Glu Ile Ser Asp His Pro Gly															
245															255
Glu His Glu Val Gly Glu Pro Glu Phe His Tyr Ile Ala Gly Ala His															
260															270
Gly Asn Glu Val Leu Gly Arg Glu Leu Leu Leu Leu Val Gln Phe															
275															285
Val Cys Gln Glu Tyr Leu Ala Arg Asn Ala Arg Ile Val His Leu Val															
290															300
Glu Glu Thr Arg Ile His Val Leu Pro Ser Leu Asn Pro Asp Gly Tyr															
305															320
Glu Lys Ala Tyr Glu Gly Ser Glu Leu Gly Gly Trp Ser Leu Gly															
325															335
Arg Trp Thr His Asp Gly Ile Asp Ile Asn Asn Asn Phe Pro Asp Leu															
340															350
Asn Thr Leu Leu Trp Glu Ala Glu Asp Arg Gln Asn Val Pro Arg Lys															
355															365
Val Pro Asn His Tyr Ile Ala Ile Pro Glu Trp Phe Leu Ser Glu Asn															
370															380
Ala Thr Val Val Ala Ala Glu Thr Arg Ala Val Ile Ala Trp Met Glu															
385															400
Lys Ile Pro Phe Val Leu Gly Gly Asn Leu Gln Gly Gly Glu Leu Val															
405															415
Val Ala Tyr Pro Tyr Asp Leu Val Arg Ser Pro Trp Lys Thr Gln Glu															
420															430
His Thr Pro Thr Pro Asp Asp His Val Phe Arg Trp Leu Ala Tyr Ser															
435															445
Tyr Ala Ser Thr His Arg Leu Met Thr Asp Ala Arg Arg Arg Val Cys															
450															460
His Thr Glu Asp Phe Gln Lys Glu Glu Gly Thr Val Asn Gly Ala Ser															
465															480

Trp His Thr Val Ala Gly Ser Leu Asn Asp Phe Ser Tyr Leu His Thr		
485	490	495
Asn Cys Phe Glu Leu Ser Ile Tyr Val Gly Cys Asp Lys Tyr Pro His		
500	505	510
Glu Ser Gln Leu Pro Glu Glu Trp Glu Asn Asn Arg Glu Ser Leu Ile		
515	520	525
Val Phe Met Glu Gln Val His Arg Gly Ile Lys Gly Leu Val Arg Asp		
530	535	540
Ser His Gly Lys Gly Ile Pro Asn Ala Ile Ile Ser Val Glu Gly Ile		
545	550	555
Asn His Asp Ile Arg Thr Ala Asn Asp Gly Asp Tyr Trp Arg Leu Leu		
565	570	575
Asn Pro Gly Glu Tyr Val Val Thr Ala Lys Ala Glu Gly Phe Thr Ala		
580	585	590
Ser Thr Lys Asn Cys Met Val Gly Tyr Asp Met Gly Ala Thr Arg Cys		
595	600	605
Asp Phe Thr Leu Ser Lys Thr Asn Met Ala Arg Ile Arg Glu Ile Met		
610	615	620
Glu Lys Phe Gly Lys Gln Pro Val Ser Leu Pro Ala Arg Arg Leu Lys		
625	630	640
Leu Arg Gly Arg Lys Arg Arg Gln Arg Gly		
645	650	

<210> 25
 <211> 328
 <212> DNA
 <213> Homo sapiens

<400> 25
 aaataagatt gaggaagctc ctgaagaagt cttatgtcct cccaaagtact taaaagcttc 60
 accaaaaacac ccagaatcaa atactgctgg aatggacatc tttgc当地 at tctctgcata 120
 catcaagaat tcaaggccag aggttaatga agcattagtg aagcatctct taaaaaccct 180
 gcagaaaatg gaatatctga attctcctct ccctgatgaa attgatgaaa atagcatgca 240
 ggacactaag ttttctacac ataaatttct gaatggcaat aaaatggcat tagctgattg 300
 ccatctgctg cccaaactgc atattgtc 328

<210> 26
<211> 331
<212> DNA
<213> Homo sapiens

<400> 26
aaataagatt gaggaatttc ttgaagaagt cttatgcctt cccaaatgtact taaagcttc 60
accaaaaacac ccagaatcaa atactgctgg aatggacatc tttgcctaaat tctctgcata 120
tatcaagaat tcaaggccag aggctaatga agcactggag aggggtctcc tgaaaaccct 180
gcagaaaactg gatgaatatc tgaattctcc tctccctgat gaaattgtatg aaaatgtat 240
ggaggacata aagtttcta cacgtaaatt tctggatggc aatgaaatga cattagctga 300
ttgcaacctg ctgccccaaac tgcatattgt c 331

<210> 27
<211> 247
<212> PRT
<213> Homo sapiens

<400> 27
Met Ala Leu Ser Met Pro Leu Asn Gly Leu Lys Glu Glu Asp Lys Glu
1 5 10 15

Pro Leu Ile Glu Leu Phe Val Lys Ala Gly Ser Asp Gly Glu Ser Ile
20 25 30

Gly Asn Cys Pro Phe Ser Gln Arg Leu Phe Met Ile Leu Trp Leu Lys
35 40 45

Gly Val Val Phe Ser Val Thr Thr Val Asp Leu Lys Arg Lys Pro Ala
50 55 60

Asp Leu Gln Asn Leu Ala Pro Gly Thr His Pro Pro Phe Ile Thr Phe
65 70 75 80

Asn Ser Glu Val Lys Thr Asp Val Asn Lys Ile Glu Glu Phe Leu Glu
85 90 95

Glu Val Leu Cys Pro Pro Lys Tyr Leu Lys Leu Ser Pro Lys His Pro
100 105 110

Glu Ser Asn Thr Ala Gly Met Asp Ile Phe Ala Lys Phe Ser Ala Tyr
115 120 125

Ile Lys Asn Ser Arg Pro Glu Ala Asn Glu Ala Leu Glu Arg Gly Leu
130 135 140

Leu Lys Thr Leu Gln Lys Leu Asp Glu Tyr Leu Asn Ser Pro Leu Pro

145	150	155	160
Asp Glu Ile Asp Glu Asn Ser Met Glu Asp Ile Lys Phe Ser Thr Arg			
165	170	175	
Arg Phe Leu Asp Gly Asp Glu Met Thr Leu Ala Asp Cys Asn Leu Leu			
180	185	190	
Pro Lys Leu His Ile Val Lys Val Val Ala Lys Lys Tyr Arg Asn Phe			
195	200	205	
Asp Ile Pro Lys Gly Met Thr Gly Ile Trp Arg Tyr Leu Thr Asn Ala			
210	215	220	
Tyr Ser Arg Asp Glu Phe Thr Asn Thr Cys Pro Ser Asp Lys Glu Val			
225	230	235	240
Glu Ile Ala Tyr Ser Asp Val			
245			

<210> 28
 <211> 550
 <212> DNA
 <213> Homo sapiens

<400> 28
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 catgttaagag ggcacagcat gtttccatg ctggaccctg ctctgctcac tccacacacc 120
 ttctgacacc caccatggac actgttcagc aactggaaga aagagggcac ctgatggaca 180
 gcaaaggctt ttagtataaa taaatacatg aaggaactag gagtgggact agccctctgc 240
 gaaaaaaaaagg gtgctatggc caaaaaagat tgtattagct tttttgatgg caaaaacctc 300
 accataaaaa tggagagttac tttaaaatca tacagtttc tcacacttag gggagggaaa 360
 ttcaaaagaaa ctacaggtga cggcagaaaa actcagactg caccttaca tatggcacat 420
 tggttcgaca tcagaagtgg aatggaaagg aaggccaaat aagaaaattg aaagacagga 480
 aattagtggt ggactgcattc ataaacaatg tcacctgtac tcagatctat gaaaaagtag 540
 aataaaaaact 550

<210> 29
 <211> 136
 <212> PRT
 <213> Homo sapiens

<400> 29
 Met Asp Thr Val Gln Gln Leu Glu Glu Arg Gly His Leu Met Asp Ser
 1 5 10 15

Lys Gly Phe Asp Glu Asn Lys Tyr Met Lys Glu Leu Gly Val Gly Leu
20 25 30

Ala Leu Cys Glu Lys Lys Gly Ala Met Ala Lys Lys Asp Cys Ile Ser
35 40 45

Phe Phe Asp Gly Lys Asn Leu Thr Ile Lys Met Glu Ser Thr Leu Lys
50 55 60

Ser Tyr Ser Phe Leu Thr Leu Arg Gly Gly Lys Phe Lys Glu Thr Thr
65 70 75 80

Gly Asp Gly Arg Lys Thr Gln Thr Cys Thr Phe Thr Tyr Gly Thr Leu
85 90 95

Val Arg His Gln Lys Trp Asn Gly Lys Glu Gly Lys Ile Arg Lys Leu
100 105 110

Lys Asp Arg Lys Leu Val Val Asp Cys Ile Ile Asn Asn Val Thr Cys
115 120 125

Thr Gln Ile Tyr Glu Lys Val Glu
130 135

<210> 30
<211> 135
<212> PRT
<213> Homo sapiens

<400> 30
Met Ala Thr Val Gln Gln Leu Glu Gly Arg Trp Arg Leu Val Asp Ser
1 5 10 15

Lys Gly Phe Asp Glu Tyr Met Lys Glu Leu Gly Val Gly Ile Ala Leu
20 25 30

Arg Lys Met Gly Ala Met Ala Lys Pro Asp Cys Ile Ile Thr Cys Asp
35 40 45

Gly Lys Asn Leu Thr Ile Lys Thr Glu Ser Thr Leu Lys Thr Thr Gln
50 55 60

Phe Ser Cys Thr Leu Gly Glu Lys Phe Glu Glu Thr Thr Ala Asp Gly
65 70 75 80

Arg Lys Thr Gln Thr Val Cys Asn Phe Thr Asp Gly Ala Leu Val Gln
85 90 95

His Gln Glu Trp Asp Gly Lys Glu Ser Thr Ile Thr Arg Lys Leu Lys
100 105 110

Asp Gly Lys Leu Val Val Glu Cys Val Met Asn Asn Val Thr Cys Thr
115 120 125

Arg Ile Tyr Glu Lys Val Glu
130 135

<210> 31
<211> 135
<212> PRT
<213> Homo sapiens

<400> 31
Met Ala Thr Val Gln Gln Leu Glu Gly Arg Trp Arg Leu Val Asp Ser
1 5 10 15

Lys Gly Phe Asp Glu Tyr Met Lys Glu Leu Gly Val Gly Ile Ala Leu
20 25 30

Arg Lys Met Gly Ala Met Ala Lys Pro Asp Cys Ile Ile Thr Cys Asp
35 40 45

Gly Lys Asn Leu Thr Ile Lys Thr Glu Ser Thr Leu Lys Thr Thr Gln
50 55 60

Phe Ser Cys Thr Leu Gly Glu Lys Phe Glu Glu Thr Thr Ala Asp Gly
65 70 75 80

Arg Lys Thr Gln Thr Val Cys Asn Phe Thr Asp Gly Ala Leu Val Gln
85 90 95

His Gln Glu Trp Asp Gly Lys Glu Ser Thr Ile Thr Arg Lys Leu Lys
100 105 110

Asp Gly Lys Leu Val Val Glu Cys Val Met Asn Asn Val Thr Cys Thr
115 120 125

Arg Ile Tyr Glu Lys Val Glu
130 135

<210> 32
<211> 512
<212> DNA

<213> Homo sapiens

<400> 32

atgctgccgc cgccgcggcc cgtagctgcc ttggcgctgc ctgtgctcct gctactgctg 60
gtgggtctga cgccgcccccc gaccggcgca aggccatccc caggcccaga ttacctgcgg 120
cgccgctgga tgccgctgct agccggagggc gagggctgcg ctccctgcgg gccagaagag 180
tgccgcgcgc cgccgggctg cctggcgggc agggtgcgca acgcgtgcgg ctgctgctgg 240
aatgcgcaca acctcgaggg ccagctctgc gacctggacc ccagtgctca cttctacggg 300
cactgcggcg agcagcttga gtgcgggctg gacacaggcg ggcacactgag ccgcggagag 360
gtgcggaaac ctctgtgtc ctgtcggttc cagagtccgc tctgcggggtc cgacggtcac 420
acctactccc agatctgccc cctgcaggag gcggcccgca ctgcggccga tgccaacctc 480
actgtggcac acccggggccc ctgcgaatcg gg 512

<210> 33

<211> 512

<212> DNA

<213> Homo sapiens

<400> 33

atgctgccgc cgccgcggcc cgtagctgcc ttggcgctgc ctgtgctcct gctactgctg 60
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cgccgctgga tgccgctgct agccggagggc gagggctgcg ctccctgcgg gccagaagag 180
tgccgcgcgc cgccgggctg cctggcgggc agggtgcgca acgcgtgcgg ctgctgctgg 240
aatgcgcaca acctcgaggg ccagctctgc gacctggacc ccagtgctca cttctacggg 300
cactgcggcg agcagcttga gtgcgggctg gacacaggcg ggcacactgag ccgcggagag 360
gtgcggaaac ctctgtgtc ctgtcggttc cagagtccgc tctgcggggtc cgacggtcac 420
acctactccc agatctgccc cctgcaggag gcggcccgca ctgcggccga tgccaacctc 480
actgtggcac acccggggccc ctgcgaatcg gg 512

<210> 34

<211> 304

<212> PRT

<213> Homo sapiens

<400> 34

Met Leu Pro Pro Pro Arg Pro Ala Ala Ala Leu Ala Leu Pro Val Leu
1 5 10 15

Leu Leu Leu Leu Val Val Leu Thr Pro Pro Pro Thr Gly Ala Arg Pro
20 25 30

Ser Pro Gly Pro Asp Tyr Leu Arg Arg Gly Trp Met Arg Leu Leu Ala
35 40 45

Glu Gly Glu Gly Cys Ala Pro Cys Arg Pro Glu Glu Cys Ala Ala Pro
50 55 60

Arg	Gly	Cys	Leu	Ala	Gly	Arg	Val	Arg	Asp	Ala	Cys	Gly	Cys	Cys	Trp
65															80
Glu Cys Ala Asn Leu Glu Gly Gln Leu Cys Asp Leu Asp Pro Ser Ala															
85	-	-	-	-	-	-	-	-	-	-	-	-	-	-	95
His Phe Tyr Gly His Cys Gly Glu Gln Leu Glu Cys Arg Leu Asp Thr															
100															110
Gly Gly Asp Leu Ser Arg Gly Glu Val Pro Glu Pro Leu Cys Ala Cys															
115															125
Arg Ser Gln Ser Pro Leu Cys Gly Ser Asp Gly His Thr Tyr Ser Gln															
130															140
Ile Cys Arg Leu Gln Glu Ala Ala Arg Ala Arg Pro Asp Ala Asn Leu															
145															160
Thr Val Ala His Pro Gly Pro Cys Glu Ser Gly Pro Gln Ile Val Ser															
165															175
His Pro Tyr Asp Thr Trp Asn Val Thr Gly Gln Asp Val Ile Phe Gly															
180															190
Cys Glu Val Phe Ala Tyr Pro Met Ala Ser Ile Glu Trp Arg Lys Asp															
195															205
Gly Leu Asp Ile Gln Leu Pro Gly Asp Asp Pro His Ile Ser Val Gln															
210															220
Phe Arg Gly Gly Pro Gln Arg Phe Glu Val Thr Gly Trp Leu Gln Ile															
225															240
Gln Ala Val Arg Pro Ser Asp Glu Gly Thr Tyr Arg Cys Leu Ala Arg															
245															255
Asn Ala Leu Gly Gln Val Glu Ala Pro Ala Ser Leu Thr Val Leu Thr															
260															270
Pro Asp Gln Leu Asn Ser Thr Gly Ile Pro Gln Leu Arg Ser Leu Asn															
275															285
Leu Val Pro Glu Glu Ala Glu Ser Glu Glu Asn Asp Asp Tyr Tyr															
290															300

<210> 35
<211> 1308
<212> DNA
<213> Homo sapiens

<400> 35

cagcatgagc ttcaccactc gtcacaccc ttccaccaac taccggccc tgggctctgt 60
ccaggcgccc agctacggcg cccggccggc cagcagcgcg gccagcgctc atgcaggcg 120
tgggggctct ggttcccgga tctccgtgtc ccgcgtccacc agttcaggg gcccgtggg 180
gtccgggggc ctggccaccg ggatagccgg gggctctggca ggaatgggag gcatccagaa 240
cgagaaggag accatgcaaa gcctgaacga ccgcctggcc tcttacctgg acagagttag 300
gagcctggag accgagaacc ggaggctgga gagcaaaatc cgggagact tggagaagaa 360
gggaccccag gtcagagact ggagccatta cttcaagatc atcgaggacc tgagggctca 420
gatcttcgca aatactgtgg acaatgccc catcgatctc cagattgaca atgcccgtct 480
tgctgctgat gacttagatg tcaagtatga gacagagctg gccatgcgcc agtctgtgg 540
gaacgacatc catggctcc gcaaggtcat tcatgacacc aatatcacac gactgcagct 600
ggagacagag atcgaggctc tcaaggagga gctgctcttc atgaagaaga accacgaaga 660
ggaagtaaaaa ggcctacaag cccagattgc cagctctggg ttgaccgtgg aggtagatgc 720
ccccaaatct caggacactcg ccaagatcat ggcagacatc cgggccaat atgacgagct 780
ggctcggaag aaccgagagg agctagacaa gtactggctc cagcagattg aggagagcac 840
cacagtggtc accacacagt ctgctgagggt tggagctgct gagacgacgc tcacagagct 900
gagacgtaca gtccagtcct tggagatcga cctggactcc atgagaaatc tgaaggccag 960
cttggagaac agcctgaggg aggtggaggc ccgctacgccc ctacagatgg agcagctcaa 1020
cgggatcctg ctgcaccttg agtcagagct ggcacagacc cggcagagg gacagcgcca 1080
ggcccaggag tatgaggccc tgctgaacat caaggtcaag ctggaggctg agatcgccac 1140
ctaccgcgcctc ctgctggaaatgatggcggatg cttaatctt ggtatgcct tggacagcag 1200
caactccatg caaaccatcc aaaagaccac caccggccgg atagtgatg gcaaagtgg 1260
gtctgagacc aatgacacca aagttctgag gcattaagcc agcagaag 1308

<210> 36
<211> 430
<212> PRT
<213> Homo sapiens

<400> 36

Met Ser Phe Thr Thr Arg Ser Thr Phe Ser Thr Asn Tyr Arg Ser Leu
1 5 10 15

Gly Ser Val Gln Ala Pro Ser Tyr Gly Ala Arg Pro Val Ser Ser Ala
20 25 30

Ala Ser Val Tyr Ala Gly Gly Ser Gly Ser Arg Ile Ser Val
35 40 45

Ser Arg Ser Thr Ser Phe Arg Gly Gly Met Gly Ser Gly Gly Leu Ala

50	55	60
Thr Gly Ile Ala Gly Gly Leu Ala Gly Met Gly Gly Ile Gln Asn Glu		
65	70	75
Lys Glu Thr Met Gln Ser Leu Asn Asp Arg Leu Ala Ser Tyr Leu Asp		
85	90	95
Arg Val Arg Ser Leu Glu Thr Glu Asn Arg Arg Leu Glu Ser Lys Ile		
100	105	110
Arg Glu His Leu Glu Lys Lys Gly Pro Gln Val Arg Asp Trp Ser His		
115	120	125
Tyr Phe Lys Ile Ile Glu Asp Leu Arg Ala Gln Ile Phe Ala Asn Thr		
130	135	140
Val Asp Asn Ala Arg Ile Val Leu Gln Ile Asp Asn Ala Arg Leu Ala		
145	150	155
160		
Ala Asp Asp Phe Arg Val Lys Tyr Glu Thr Glu Leu Ala Met Arg Gln		
165	170	175
Ser Val Glu Asn Asp Ile His Gly Leu Arg Lys Val Ile Asp Asp Thr		
180	185	190
Asn Ile Thr Arg Leu Gln Leu Glu Thr Glu Ile Glu Ala Leu Lys Glu		
195	200	205
Glu Leu Leu Phe Met Lys Lys Asn His Glu Glu Glu Val Lys Gly Leu		
210	215	220
Gln Ala Gln Ile Ala Ser Ser Gly Leu Thr Val Glu Val Asp Ala Pro		
225	230	235
240		
Lys Ser Gln Asp Leu Ala Lys Ile Met Ala Asp Ile Arg Ala Gln Tyr		
245	250	255
Asp Glu Leu Ala Arg Lys Asn Arg Glu Glu Leu Asp Lys Tyr Trp Ser		
260	265	270
Gln Gln Ile Glu Glu Ser Thr Thr Val Val Thr Thr Gln Ser Ala Glu		
275	280	285
Val Gly Ala Ala Glu Thr Thr Leu Thr Glu Leu Arg Arg Thr Val Gln		
290	295	300
Ser Leu Glu Ile Asp Leu Asp Ser Met Arg Asn Leu Lys Ala Ser Leu		

305	310	315	320
Glu Asn Ser Leu Arg Glu Val Glu Ala Arg Tyr Ala Leu Gln Met Glu			
325	330	335	
Gln Leu Asn Gly Ile Leu Leu His Leu Glu Ser Glu Leu Ala Gln Thr			
340	345	350	
Arg Ala Glu Gly Gln Arg Gln Ala Gln Glu Tyr Glu Ala Leu Leu Asn			
355	360	365	
Ile Lys Val Lys Leu Glu Ala Glu Ile Ala Thr Tyr Arg Arg Leu Leu			
370	375	380	
Glu Asp Gly Glu Asp Phe Asn Leu Gly Asp Ala Leu Asp Ser Ser Asn			
385	390	395	400
Ser Met Gln Thr Ile Gln Lys Thr Thr Arg Arg Ile Val Asp Gly			
405	410	415	
Lys Val Val Ser Glu Thr Asn Asp Thr Lys Val Leu Arg His			
420	425	430	
<210> 37			
<211> 722			
<212> PRT			
<213> Mus musculus			
<400> 37			
Met Trp Gly Leu Leu Leu Ala Val Thr Ala Phe Ala Pro Ser Val Gly			
1	5	10	15
Leu Gly Leu Gly Ala Pro Ser Ala Ser Val Pro Gly Leu Ala Pro Gly			
20	25	30	
Ser Thr Leu Ala Pro His Ser Ser Val Ala Gln Pro Ser Thr Lys Ala			
35	40	45	
Asn Glu Thr Ser Glu Arg His Val Arg Leu Arg Val Ile Lys Lys Lys			
50	55	60	
Lys Ile Val Val Lys Lys Arg Lys Lys Leu Arg His Pro Gly Pro Leu			
65	70	75	80
Gly Thr Ala Arg Pro Val Val Pro Thr His Pro Ala Lys Thr Leu Thr			
85	90	95	

Leu	Pro	Glu	Lys	Gln	Glu	Pro	Gly	Cys	Pro	Pro	Leu	Gly	Leu	Glu	Ser
100						105					110				
Leu	Arg	Val	Ser	Asp	Ser	Gln	Leu	Glu	Ala	Ser	Ser	Ser	Gln	Ser	Phe
115						120					125				
Gly	Leu	Gly	Ala	His	Arg	Gly	Arg	Leu	Asn	Ile	Gln	Ser	Gly	Leu	Glu
130						135					140				
Asp	Gly	Asp	Leu	Tyr	Asp	Gly	Ala	Trp	Cys	Ala	Glu	Gln	Gln	Asp	Thr
145						150					155			160	
Glu	Pro	Trp	Leu	Gln	Val	Asp	Ala	Lys	Asn	Pro	Val	Arg	Phe	Ala	Gly
165						170					175				
Ile	Val	Thr	Gln	Gly	Arg	Asn	Ser	Val	Trp	Arg	Tyr	Asp	Trp	Val	Thr
180						185					190				
Ser	Phe	Lys	Val	Gln	Phe	Ser	Asn	Asp	Ser	Gln	Thr	Trp	Trp	Lys	Ser
195						200					205				
Arg	Asn	Ser	Thr	Gly	Met	Asp	Ile	Val	Phe	Pro	Ala	Asn	Ser	Asp	Ala
210						215					220				
Glu	Thr	Pro	Val	Leu	Asn	Leu	Leu	Pro	Glu	Pro	Gln	Val	Ala	Arg	Phe
225						230					235			240	
Ile	Arg	Leu	Leu	Pro	Gln	Thr	Trp	Phe	Gln	Gly	Gly	Val	Pro	Cys	Leu
245						250					255				
Arg	Ala	Glu	Ile	Leu	Ala	Cys	Pro	Val	Ser	Asp	Pro	Asn	Asp	Leu	Phe
260						265					270				
Pro	Glu	Ala	His	Thr	Leu	Gly	Ser	Ser	Asn	Ser	Leu	Asp	Phe	Arg	His
275						280					285				
His	Asn	Tyr	Lys	Ala	Met	Arg	Lys	Leu	Met	Lys	Gln	Val	Asn	Glu	Gln
290						295					300				
Cys	Pro	Asn	Ile	Thr	Arg	Ile	Tyr	Ser	Ile	Gly	Lys	Ser	His	Gln	Gly
305						310					315			320	
Leu	Lys	Leu	Tyr	Val	Met	Glu	Met	Ser	Asp	His	Pro	Gly	Glu	His	Glu
325						330					335				
Leu	Gly	Glu	Pro	Glu	Val	Arg	Tyr	Val	Ala	Gly	Met	His	Gly	Asn	Glu
340						345					350				

Ala Leu Gly Arg Glu Leu Leu Leu Leu Met Gln Phe Leu Cys His
355 360 365

Glu Phe Leu Arg Gly Asp Pro Arg Val Thr Arg Leu Leu Thr Glu Thr
370 375 380

Arg Ile His Leu Leu Pro Ser Met Asn Pro Asp Gly Tyr Glu Thr Ala
385 390 395 400

Tyr His Arg Gly Ser Glu Leu Val Gly Trp Ala Glu Gly Arg Trp Thr
405 410 415

His Gln Gly Ile Asp Leu Asn His Asn Phe Ala Asp Leu Asn Thr Gln
420 425 430

Leu Trp Tyr Ala Glu Asp Asp Gly Leu Val Pro Asp Thr Val Pro Asn
435 440 445

His His Leu Pro Leu Pro Thr Tyr Tyr Thr Leu Pro Asn Ala Thr Val
450 455 460

Ala Pro Glu Thr Trp Ala Val Ile Lys Trp Met Lys Arg Ile Pro Phe
465 470 475 480

Val Leu Ser Ala Asn Leu His Gly Gly Glu Leu Val Val Ser Tyr Pro
485 490 495

Phe Asp Met Thr Arg Thr Pro Trp Ala Ala Arg Glu Leu Thr Pro Thr
500 505 510

Pro Asp Asp Ala Val Phe Arg Trp Leu Ser Thr Val Tyr Ala Gly Thr
515 520 525

Asn Arg Ala Met Gln Asp Thr Asp Arg Arg Pro Cys His Ser Gln Asp
530 535 540

Phe Ser Leu His Gly Asn Val Ile Asn Gly Ala Asp Trp His Thr Val
545 550 555 560

Pro Gly Ser Met Asn Asp Phe Ser Tyr Leu His Thr Asn Cys Phe Glu
565 570 575

Val Thr Val Glu Leu Ser Cys Asp Lys Phe Pro His Glu Lys Glu Leu
580 585 590

Pro Gln Glu Trp Glu Asn Asn Lys Asp Ala Leu Leu Thr Tyr Leu Glu
595 600 605

Gln Val Arg Met Gly Ile Thr Gly Val Val Arg Asp Lys Asp Thr Glu
610 615 620

Leu Gly Ile Ala Asp Ala Val Ile Ala Val Glu Gly Ile Asn His Asp
625 630 635 640

Val Thr Thr Ala Trp Gly Gly Asp Tyr Trp Arg Leu Leu Thr Pro Gly
645 650 655

Asp Tyr Val Val Thr Ala Ser Ala Glu Gly Tyr His Thr Val Arg Gln
660 665 670

His Cys Gln Val Thr Phe Glu Glu Gly Pro Val Pro Cys Asn Phe Leu
675 680 685

Leu Thr Lys Thr Pro Lys Glu Arg Leu Arg Glu Leu Leu Ala Thr Arg
690 695 700

Gly Lys Leu Pro Pro Asp Leu Arg Arg Lys Leu Glu Arg Leu Arg Gly
705 710 715 720

Gln Lys

<210> 38

<211> 734

<212> PRT

<213> Homo sapiens

<400> 38

Met Trp Gly Leu Leu Leu Ala Leu Ala Ala Phe Ala Pro Ala Val Gly
1 5 10 15

Pro Ala Leu Gly Ala Pro Arg Asn Ser Val Leu Gly Leu Ala Gln Pro
20 25 30

Gly Thr Thr Lys Val Pro Gly Ser Thr Pro Ala Leu His Ser Ser Pro
35 40 45

Ala Gln Pro Pro Ala Glu Thr Ala Asn Gly Thr Ser Glu Gln His Val
50 55 60

Arg Ile Arg Val Ile Lys Lys Lys Val Ile Met Lys Lys Arg Lys
65 70 75 80

Lys Leu Thr Leu Thr Arg Pro Thr Pro Leu Val Thr Ala Gly Pro Leu
85 90 95

Val Thr Pro Thr Pro Ala Gly Thr Leu Asp Pro Ala Glu Lys Gln Glu
100 105 110

Thr Gly Cys Pro Pro Leu Gly Leu Glu Ser Leu Arg Val Ser Asp Ser
115 120 125

Arg Leu Glu Ala Ser Ser Ser Gln Ser Phe Gly Leu Gly Pro His Arg
130 135 140

Gly Arg Leu Asn Ile Gln Ser Gly Leu Glu Asp Gly Asp Leu Tyr Asp
145 150 155 160

Gly Ala Trp Cys Ala Glu Glu Gln Asp Ala Asp Pro Trp Phe Gln Val
165 170 175

Asp Ala Gly His Pro Thr Arg Phe Ser Gly Val Ile Thr Gln Gly Arg
180 185 190

Asn Ser Val Trp Arg Tyr Asp Trp Val Thr Ser Tyr Lys Val Gln Phe
195 200 205

Ser Asn Asp Ser Arg Thr Trp Trp Gly Ser Arg Asn His Ser Ser Gly
210 215 220

Met Asp Ala Val Phe Pro Ala Asn Ser Asp Pro Glu Thr Pro Val Leu
225 230 235 240

Asn Leu Leu Pro Glu Pro Gln Val Ala Arg Phe Ile Arg Leu Leu Pro
245 250 255

Gln Thr Trp Leu Gln Gly Gly Ala Pro Cys Leu Arg Ala Glu Ile Leu
260 265 270

Ala Cys Pro Val Ser Asp Pro Asn Asp Leu Phe Leu Glu Ala Pro Ala
275 280 285

Ser Gly Ser Ser Asp Pro Leu Asp Phe Gln His His Asn Tyr Lys Ala
290 295 300

Met Arg Lys Leu Met Lys Gln Val Gln Glu Gln Cys Pro Asn Ile Thr
305 310 315 320

Arg Ile Tyr Ser Ile Gly Lys Ser Tyr Gln Gly Leu Lys Leu Tyr Val
325 330 335

Met Glu Met Ser Asp Lys Pro Gly Glu His Glu Leu Gly Glu Pro Glu
340 345 350

Val Arg Tyr Val Ala Gly Met His Gly Asn Glu Ala Leu Gly Arg Glu
355 360 365

Leu Leu Leu Leu Met Gln Phe Leu Cys His Glu Phe Leu Arg Gly
370 375 380

Asn Pro Gln Val Thr Arg Leu Leu Ser Glu Met Arg Ile His Leu Leu
385 390 395 400

Pro Ser Met Asn Pro Asp Gly Tyr Glu Ile Ala Tyr His Arg Gly Ser
405 410 415

Glu Leu Val Gly Trp Ala Glu Gly Arg Trp Asn Asn Gln Ser Ile Asp
420 425 430

Leu Asn His Asn Phe Ala Asp Leu Asn Thr Pro Leu Trp Glu Ala Gln
435 440 445

Asp Asp Gly Lys Val Pro His Ile Val Pro Asn His His Leu Pro Leu
450 455 460

Pro Thr Tyr Tyr Thr Leu Pro Asn Ala Thr Val Ala Pro Glu Thr Arg
465 470 475 480

Ala Val Ile Lys Trp Met Lys Arg Ile Pro Phe Val Leu Ser Ala Asn
485 490 495

Leu His Gly Gly Glu Leu Val Val Ser Tyr Pro Phe Asp Met Thr Arg
500 505 510

Thr Pro Trp Ala Ala Arg Glu Leu Thr Pro Thr Pro Asp Asp Ala Val
515 520 525

Phe Arg Trp Leu Ser Thr Val Tyr Ala Gly Ser Asn Leu Ala Met Gln
530 535 540

Asp Thr Ser Arg Arg Pro Cys His Ser Gln Asp Phe Ser Val His Gly
545 550 555 560

Asn Ile Ile Asn Gly Ala Asp Trp His Thr Val Pro Gly Ser Met Asn
565 570 575

Asp Phe Ser Tyr Leu His Thr Asn Cys Phe Glu Val Thr Val Glu Leu
580 585 590

Ser Cys Asp Lys Phe Pro His Glu Asn Glu Leu Pro Gln Glu Trp Glu
595 600 605

Asn Asn Lys Asp Ala Leu Leu Thr Tyr Leu Glu Gln Val Arg Met Gly
610 615 620

Ile Ala Gly Val Val Arg Asp Lys Asp Thr Glu Leu Gly Ile Ala Asp
625 630 635 640

Ala Val Ile Ala Val Asp Gly Ile Asn His Asp Val Thr Thr Ala Trp
645 650 655

Gly Gly Asp Tyr Trp Arg Leu Leu Thr Pro Gly Asp Tyr Met Val Thr
660 665 670

Ala Ser Ala Glu Gly Tyr His Ser Val Thr Arg Asn Cys Arg Val Thr
675 680 685

Phe Glu Glu Gly Pro Phe Pro Cys Asn Phe Val Leu Thr Lys Thr Pro
690 695 700

Lys Gln Arg Leu Arg Glu Leu Leu Ala Ala Gly Ala Lys Val Pro Pro
705 710 715 720

Asp Leu Arg Arg Arg Leu Glu Arg Leu Arg Gly Gln Lys Asp
725 730

<210> 39

<211> 267

<212> DNA

<213> Homo sapiens

<400> 39

ggaaggacac cgaccgtcc atctaccgga tccacgctgg ggacgtgtat ctctacgggg 60
gcccggggct gctgaacgtc agccggatca tcgtccaccc caactatgtc actgcggggc 120
tgggtgcgga tggccctg ctccagctgg tgagccccat gatcgagcc gctaatgtca 180
ggacggtaa gctcccccg gtctcgctgg agctcacccc gaaggaccag tgctgggtga 240
ctggctgggg agcgatcagg atgttcg 267

<210> 40

<211> 267

<212> DNA

<213> Homo sapiens

<400> 40

ggaaggacac cgaccgtcc atctaccgga tccacgctgg ggacgtgtat ctctacgggg 60
gcccggggct gctgaacgtc agccggatca tcgtccaccc caactatgtc actgcggggc 120
tgggtgcgga tggccctg ctccagctgg tgagccccat gatctgagcc gctaatgtca 180

ggacggtcaa gctctccccc gtctcgctgg agtcacccca gaaggaccag tgctgggtga 240
ctggctgggg agcgatcagg atgttcg 267

<210> 41
<211> 255
<212> PRT
<213> Homo sapiens

<400> 41
Pro Val Pro Glu Asn Asp Leu Val Gly Ile Val Gly Gly His Asn Ala
1 5 10 15

Pro Pro Gly Lys Trp Pro Trp Gln Val Ser Leu Arg Val Tyr Ser Tyr
20 25 30

His Trp Ala Ser Trp Ala His Ile Cys Gly Gly Ser Leu Ile His Pro
35 40 45

Gln Trp Val Leu Thr Ala Ala His Cys Ile Phe Trp Lys Asp Thr Asp
50 55 60

Pro Ser Ile Tyr Arg Ile His Ala Gly Asp Val Tyr Leu Tyr Gly Gly
65 70 75 80

Arg Gly Leu Leu Asn Val Ser Arg Ile Ile Val His Pro Asn Tyr Val
85 90 95

Thr Ala Gly Leu Gly Ala Asp Val Ala Leu Leu Gln Leu Val Ser Pro
100 105 110

Met Ile Gly Ala Ala Asn Val Arg Thr Val Lys Leu Ser Pro Val Ser
115 120 125

Leu Glu Leu Thr Pro Lys Asp Gln Cys Trp Val Thr Gly Trp Gly Ala
130 135 140

Ile Arg Met Phe Glu Ser Leu Pro Pro Pro Tyr Arg Leu Gln Gln Ala
145 150 155 160

Ser Val Gln Val Leu Glu Asn Ala Val Cys Glu Gln Pro Tyr Arg Asn
165 170 175

Ala Ser Gly His Thr Gly Asp Arg Gln Leu Ile Leu Asp Asp Met Leu
180 185 190

Cys Ala Gly Ser Glu Gly Arg Asp Ser Cys Gln Gly Asp Ser Gly Gly
195 200 205

Pro Leu Val Cys Arg Leu Arg Gly Ser Trp Arg Leu Val Gly Val Val
210 215 220

Ser Trp Gly Tyr Gly Cys Thr Leu Arg Asp Phe Pro Gly Val Tyr Thr
225 230 235 240

His Val Gln Ile Tyr Val Leu Trp Ile Leu Gln Gln Val Gly Glu
245 250 255

<210> 42

<211> 252

<212> PRT

<213> Mus musculus

<400> 42

Pro Arg Pro Ala Asn Gln Arg Val Gly Ile Val Gly Gly His Glu Ala
1 5 10 15

Ser Glu Ser Lys Trp Pro Trp Gln Val Ser Leu Arg Phe Lys Leu Asn
20 25 30

Tyr Trp Ile His Phe Cys Gly Gly Ser Leu Ile His Pro Gln Trp Val
35 40 45

Leu Thr Ala Ala His Cys Val Gly Pro His Ile Lys Ser Pro Gln Leu
50 55 60

Phe Arg Val Gln Leu Arg Glu Gln Tyr Leu Tyr Tyr Gly Asp Gln Leu
65 70 75 80

Leu Ser Leu Asn Arg Ile Val Val His Pro His Tyr Tyr Thr Ala Glu
85 90 95

Gly Gly Ala Asp Val Ala Leu Leu Glu Leu Glu Val Pro Val Asn Val
100 105 110

Ser Thr His Ile His Pro Ile Ser Leu Pro Pro Ala Ser Glu Thr Phe
115 120 125

Pro Pro Gly Thr Ser Cys Trp Val Thr Gly Trp Gly Asp Ile Asp Asn
130 135 140

Asp Glu Pro Leu Pro Pro Tyr Pro Leu Lys Gln Val Lys Val Pro
145 150 155 160

Ile Val Glu Asn Ser Leu Cys Asp Arg Lys Tyr His Thr Gly Leu Tyr

165

170

175

Thr Gly Asp Asp Phe Pro Ile Val His Asp Gly Met Leu Cys Ala Gly
180 185 190

Asn Thr Arg Arg Asp Ser Cys Gln Gly Asp Ser Gly Gly Pro Leu Val
195 200 205

Cys Lys Val Lys Gly Thr Trp Leu Gln Ala Gly Val Val Ser Trp Gly
210 215 220

Glu Gly Cys Ala Gln Pro Asn Lys Pro Gly Ile Tyr Thr Arg Val Thr
225 230 235 240

Tyr Tyr Leu Asp Trp Ile His Arg Tyr Val Pro Glu
245 250

<210> 43

<211> 278

<212> PRT

<213> Homo sapiens

<400> 43

Met Leu Trp Leu Leu Phe Leu Thr Leu Pro Cys Leu Gly Gly Ser Met
1 5 10 15

Ser Lys Thr Pro Val Pro Val Pro Glu Asn Asp Leu Val Gly Ile Val
20 25 30

Gly Gly His Asn Ala Pro Pro Gly Lys Trp Pro Trp Gln Val Ser Leu
35 40 45

Arg Val Tyr Ser Tyr His Trp Ala Ser Trp Ala His Ile Cys Gly Gly
50 55 60

Ser Leu Ile His Pro Gln Trp Val Leu Thr Ala Ala His Cys Ile Phe
65 70 75 80

Trp Lys Asp Thr Asp Pro Ser Ile Tyr Arg Ile His Ala Gly Asp Val
85 90 95

Tyr Leu Tyr Gly Gly Arg Gly Leu Leu Asn Val Ser Arg Ile Ile Val
100 105 110

His Pro Asn Tyr Val Thr Ala Gly Leu Gly Ala Asp Val Ala Leu Leu
115 120 125

Gln Leu Val Ser Pro Met Ile Gly Ala Ala Asn Val Arg Thr Val Lys
130 135 140

Leu Ser Pro Val Ser Leu Glu Leu Thr Pro Lys Asp Gln Cys Trp Val
145 150 155 160

Thr Gly Trp Gly Ala Ile Arg Met Phe Glu Ser Leu Pro Pro Pro Tyr
165 170 175

Arg Leu Gln Gln Ala Ser Val Gln Val Leu Glu Asn Ala Val Cys Glu
180 185 190

Gln Pro Tyr Arg Asn Ala Ser Gly His Thr Gly Asp Arg Gln Leu Ile
195 200 205

Leu Asp Asp Met Leu Cys Ala Gly Ser Glu Gly Arg Asp Ser Cys Gln
210 215 220

Gly Asp Ser Gly Gly Pro Leu Val Cys Arg Leu Arg Gly Ser Trp Arg
225 230 235 240

Leu Val Gly Val Val Ser Trp Gly Tyr Gly Cys Thr Leu Arg Asp Phe
245 250 255

Pro Gly Val Tyr Thr His Val Gln Ile Tyr Val Leu Trp Ile Leu Gln
260 265 270

Gln Val Gly Glu Leu Pro
275

<210> 44
<211> 275
<212> PRT
<213> Homo sapiens

<400> 44

Met Leu Asn Leu Leu Leu Ala Leu Pro Val Leu Ala Ser Arg Ala
1 5 10 15

Tyr Ala Ala Pro Ala Pro Gly Gln Ala Leu Gln Arg Val Gly Ile Val
20 25 30

Gly Gly Gln Glu Ala Pro Arg Ser Lys Trp Pro Trp Gln Val Ser Leu
35 40 45

Arg Val His Gly Pro Tyr Trp Met His Phe Cys Gly Gly Ser Leu Ile
50 55 60

His Pro Gln Trp Val Leu Thr Ala Ala His Cys Val Gly Pro Asp Val			
65	70	75	80
Lys Asp Leu Ala Ala Leu Arg Val Gln Leu Arg Glu Gln His Leu Tyr			
85	90	95	
Tyr Gln Asp Gln Leu Leu Pro Val Ser Arg Ile Ile Val His Pro Gln			
100	105	110	
Phe Tyr Thr Ala Gln Ile Gly Ala Asp Ile Ala Leu Leu Glu Leu Glu			
115	120	125	
Glu Pro Val Lys Val Ser Ser His Val His Thr Val Thr Leu Pro Pro			
130	135	140	
Ala Ser Glu Thr Phe Pro Pro Gly Met Pro Cys Trp Val Thr Gly Trp			
145	150	155	160
Gly Asp Val Asp Asn Asp Glu Arg Leu Pro Pro Phe Pro Leu Lys			
165	170	175	
Gln Val Lys Val Pro Ile Met Glu Asn His Ile Cys Asp Ala Lys Tyr			
180	185	190	
His Leu Gly Ala Tyr Thr Gly Asp Asp Val Arg Ile Val Arg Asp Asp			
195	200	205	
Met Leu Cys Ala Gly Asn Thr Arg Arg Asp Ser Cys Gln Gly Asp Ser			
210	215	220	
Gly Gly Pro Leu Val Cys Lys Val Asn Gly Thr Trp Leu Gln Ala Gly			
225	230	235	240
Val Val Ser Trp Gly Glu Gly Cys Ala Gln Pro Asn Arg Pro Gly Ile			
245	250	255	
Tyr Thr Arg Val Thr Tyr Tyr Leu Asp Trp Ile His His Tyr Val Pro			
260	265	270	
Lys Lys Pro			
275			

<210> 45
<211> 1170
<212> DNA
<213> Homo sapiens

<400> 45

caggtcggcc acgggacctg acgcaacagg atggacgagt cccctgagcc tctgcagcag 60
ggcagagggc cggtgccgt ccgacggcag cgcccagcac cccgggtct gcgtgagatg 120
ctgaaggcca ggctgtggt cagctgctcg tgcagtgtgc tgtgcgtccg ggcgtggtg 180
caggacctgc tccccccac gcgctggctg cgtcagtacc gcccgcggga gtacctggca 240
ggcgcacgtca tgtctggct ggtcatcgcc atcatcctgg tcccgcaggc catgcctac 300
tcattgctgg cccggctgca gcccacatctac agcctctata cgtccttctt cgccaaacctc 360
atctacttcc tcatgggcac ctcacggcat gtctccgtgg gcatcttcag cctgctttgc 420
ctcatggtg ggcaggtggt ggaccgggag ctccagctgg cccgcttga cccctcccag 480
gacggcctgc agccccggagc caacagcagc accctcaacg gtcggctgc catgctggac 540
tgccggcgtg actgctacgc catccgtgtc gccaccgccc tcacgctgtat gaccggctt 600
taccaggtcc tcatggcggt cctccggctg ggcttgcgtt ccccttaccc ctcacagccca 660
ctgctcgatg gctttgccc gggggctcc gtcggatccc gtcggatccc gggccggca tggtggtctt cacatggctg 780
agcctgctgc gcccgcggg gcaaggccaaac gtgtgcgacg tggtcaccag cacggtgtgc 840
ctggcgggtgc tgctagccgc gaaggagctc tcagaccgct accgacaccg cctgagggtg 900
ccgctgccccca cggagctgct ggtcatcggt gtggccacac tcgtgtcgca cttcgggcag 960
ctccacaagc gctttggctc gagcgtggct ggcacatcc ccacgggtt catgccccct 1020
caggtccccag agccccaggct gatgcagcgt gtggcttgg atgcccgtggc cctggccctc 1080
gtggctgccc cttctccat ctgcgtggcg gagatgttcg cccgcagtca cggctactct 1140
gtgcgtgcca accaggagct gtcggctgtg 1170

<210> 46

<211> 1170

<212> DNA

<213> Homo sapiens

<400> 46

caggtcggcc acgggacctg acgcaacagg atggacgagt cccctgagcc tctgcagcag 60
ggcagagggc cggtgccgt ccgacggcag cgcccagcac cccgggtct gcgtgagatg 120
ctgaaggcca ggctgtggt cagctgctcg tgcagtgtgc tgtgcgtccg ggcgtggtg 180
caggacctgc tccccccac gcgctggctg cgtcagtacc gcccgcggga gtacctggca 240
ggcgcacgtca tgtctggct ggtcatcgcc atcatcctgg tgccgcaggc catgcctac 300
tcattgctgg cccggctgca gcccacatctac agcctctata cgtccttctt cgccaaacctc 360
atctacttcc tcatgggcac ctcacggcat gtctccgtgg gcatcttcag cctgctttgc 420
ctcatggtg ggcaggtggt ggaccgggag ctccagctgg cccgcttga cccctcccag 480
gacggcctgc agccccggagc caacagcagc accctcaacg gtcggctgc catgctggac 540
tgccggcgtg actgctacgc catccgtgtc gccaccgccc tcacgctgtat gaccggctt 600
taccaggtcc tcatggcggt cctccggctg ggcttgcgtt ccccttaccc ctcacagccca 660
ctgctcgatg gctttgccc gggggctcc gtcggatccc gtcggatccc gggccggca tggtggtctt cacatggctg 780
agcctgctgc gcccgcggg gcaaggccaaac gtgtgcgacg tggtcaccag cacggtgtgc 840
ctggcgggtgc tgctagccgc gaaggagctc tcagaccgct accgacaccg cctgagggtg 900
ccgctgccccca cggagctgct ggtcatcggt gtggccacac tcgtgtcgca cttcgggcag 960
ctccacaagc gctttggctc gagcgtggct ggcacatcc ccacgggtt catgccccct 1020
caggtccccag agccccaggct gatgcagcgt gtggcttgg atgcccgtggc cctggccctc 1080

gtggctgccg cttctccat ctcgtggcg gagatgttcg cccgcagtca cggctactct 1140
gtgcgtgcca accaggagct gctggctgtg 1170

<210> 47
<211> 434
<212> PRT
<213> Homo sapiens

<400> 47
Met Asp Glu Ser Pro Glu Pro Leu Gln Gln Gly Arg Gly Pro Val Pro
1 5 10 15
Val Arg Arg Gln Arg Pro Ala Pro Arg Gly Leu Arg Glu Met Leu Lys
20 25 30
Ala Arg Leu Trp Cys Ser Cys Ser Cys Ser Val Leu Cys Val Arg Ala
35 40 45
Leu Val Gln Asp Leu Leu Pro Ala Thr Arg Trp Leu Arg Gln Tyr Arg
50 55 60
Pro Arg Glu Tyr Leu Ala Gly Asp Val Met Ser Gly Leu Val Ile Gly
65 70 75 80
Ile Ile Leu Val Pro Gln Ala Ile Ala Tyr Ser Leu Leu Ala Gly Leu
85 90 95
Gln Pro Ile Tyr Ser Leu Tyr Thr Ser Phe Phe Ala Asn Leu Ile Tyr
100 105 110
Phe Leu Met Gly Thr Ser Arg His Val Ser Val Gly Ile Phe Ser Leu
115 120 125
Leu Cys Leu Met Val Gly Gln Val Val Asp Arg Glu Leu Gln Leu Ala
130 135 140
Gly Phe Asp Pro Ser Gln Asp Gly Leu Gln Pro Gly Ala Asn Ser Ser
145 150 155 160
Thr Leu Asn Gly Ser Ala Ala Met Leu Asp Cys Gly Arg Asp Cys Tyr
165 170 175
Ala Ile Arg Val Ala Thr Ala Leu Thr Leu Met Thr Gly Leu Tyr Gln
180 185 190
Val Leu Met Gly Val Leu Arg Leu Gly Phe Val Ser Ala Tyr Leu Ser
195 200 205

Gln Pro Leu Leu Asp Gly Phe Ala Met Gly Ala Ser Val Thr Ile Leu
210 215 220

Thr Ser Gln Leu Lys His Leu Leu Gly Val Arg Ile Pro Arg His Gln
225 230 235 240

Gly Pro Gly Met Val Val Leu Thr Trp Leu Ser Leu Leu Arg Gly Ala
245 250 255

Gly Gln Ala Asn Val Cys Asp Val Val Thr Ser Thr Val Cys Leu Ala
260 265 270

Val Leu Leu Ala Ala Lys Glu Leu Ser Asp Arg Tyr Arg His Arg Leu
275 280 285

Arg Val Pro Leu Pro Thr Glu Leu Leu Val Ile Val Val Ala Thr Leu
290 295 300

Val Ser His Phe Gly Gln Leu His Lys Arg Phe Gly Ser Ser Val Ala
305 310 315 320

Gly Asp Ile Pro Thr Gly Phe Met Pro Pro Gln Val Pro Glu Pro Arg
325 330 335

Leu Met Gln Arg Val Ala Leu Asp Ala Val Ala Leu Ala Leu Val Ala
340 345 350

Ala Ala Phe Ser Ile Ser Leu Ala Glu Met Phe Ala Arg Ser His Gly
355 360 365

Tyr Ser Val Arg Ala Asn Gln Glu Leu Leu Ala Val His Arg Gly His
370 375 380

Leu Arg Gly Ala Cys Gln Gly Val Gly Leu Pro Gly Cys Gly Ser
385 390 395 400

Pro Ala Asp Ala Leu Val Trp Ala Gly Thr Gly Thr Cys Met Leu Val
405 410 415

Ser Thr Glu Ala Gly Leu Leu Ala Gly Val Ile Leu Ser Leu Leu Ser
420 425 430

Leu Ala

<211> 435

<212> PRT

<213> Rattus rattus

<400> 48

Met Asp Ala Ser Pro Glu Pro Pro Gln Lys Gly Gly Thr Leu Val Leu

1

5

10

15

Val Arg Arg Gln Pro Pro Val Ser Gln Gly Leu Leu Glu Thr Leu Lys

20

25

30

Ala Arg Leu Lys Lys Ser Cys Thr Cys Ser Met Pro Cys Ala Gln Ala

35

40

45

Leu Val Gln Gly Leu Phe Pro Val Ile Arg Trp Leu Pro Gln Tyr Arg

50

55

60

Leu Lys Glu Tyr Leu Ala Gly Asp Val Met Ser Gly Leu Val Ile Gly

65

70

75

80

Ile Ile Leu Val Pro Gln Ala Ile Ala Tyr Ser Leu Leu Ala Gly Leu

85

90

95

Gln Pro Ile Tyr Ser Leu Tyr Thr Ser Phe Phe Ala Asn Leu Ile Tyr

100

105

110

Phe Leu Met Gly Thr Ser Arg His Val Asn Val Gly Ile Phe Ser Leu

115

120

125

Leu Cys Leu Met Val Gly Gln Val Val Asp Arg Glu Leu Gln Leu Ala

130

135

140

Gly Phe Asp Pro Ser Gln Asp Ser Leu Gly Pro Gly Asn Asn Asp Ser

145

150

155

160

Thr Leu Asn Asn Thr Ala Thr Leu Thr Val Gly Leu Gln Asp Cys Gly

165

170

175

Arg Asp Cys His Ala Ile Arg Ile Ala Thr Ala Leu Thr Leu Met Ala

180

185

190

Gly Leu Tyr Gln Val Leu Met Gly Ile Leu Arg Leu Gly Phe Val Ser

195

200

205

Thr Tyr Leu Ser Gln Pro Leu Leu Asp Gly Phe Ala Met Gly Ala Ser

210

215

220

Val Thr Ile Leu Thr Ser Gln Ala Lys His Leu Leu Gly Val Arg Ile

225 230 235 240
Pro Arg His Gln Gly Leu Gly Met Val Ile His Thr Trp Leu Ser Leu
245 250 255
Leu Gln Asn Val Gly Gln Ala Asn Leu Cys Asp Val Val Thr Ser Ala
260 265 270
Val Cys Leu Ala Val Leu Leu Thr Ala Lys Glu Leu Ser Asp Arg Tyr
275 280 285
Arg His Tyr Leu Lys Val Pro Val Pro Thr Glu Leu Leu Val Ile Val
290 295 300
Val Ala Thr Ile Ala Ser His Phe Gly Gln Leu His Thr Arg Phe Gly
305 310 315 320
Ser Ser Val Ala Gly Asn Ile Pro Thr Gly Phe Val Ala Pro Gln Ile
325 330 335
Pro Asp Pro Lys Ile Met Trp Ser Val Ala Leu Asp Ala Met Ser Leu
340 345 350
Ala Leu Val Gly Ser Ala Phe Ser Ile Ser Leu Ala Glu Met Phe Ala
355 360 365
Arg Ser His Gly Tyr Ser Val Ser Ala Asn Gln Glu Leu Leu Ala Val
370 375 380
Gly Cys Cys Asn Val Leu Pro Ala Phe Phe His Cys Phe Ala Thr Ser
385 390 395 400
Ala Ala Leu Ser Lys Thr Leu Val Lys Ile Ala Thr Gly Cys Gln Thr
405 410 415
Gln Leu Ser Ser Val Val Ser Ala Ala Val Val Leu Leu Val Leu Leu
420 425 430
Val Leu Ala
435

<210> 49
<211> 404
<212> DNA
<213> Homo sapiens

<400> 49

tgaggaggc tttctgtaat acctggaagc tgaccgacca gaactttgat gagtacatga 60
aggctctagg gatgggcttt gtcacttaggc aggtggaaa tgtggacaaa ccaagagtga 120
ttatcagtca agaagaagac aaggtagtgc tcaggattca aagtatgtc aagaacacag 180
aggttagttt ccatctggga gaagagttt atgaaaccac tacagatgac agaaactgca 240
agtttgttgc tagtctggac agagacaaac tcattcacat acagaaatgg gatgacaaag 300
aaacatattt tataagagaa attaagtatg gtgaaatggt tatgacctt actttgggt 360
atgatgtggc tgccgttcac cactataaga aggcataaaa atgt 404

<210> 50
<211> 404
<212> DNA
<213> Homo sapiens

<400> 50
tggggaggc tttctgtgct acctggaagc tgaccaacag tcagaacttt gatgagtaca 60
tgaaggctct aggcgtggc tttgccacta ggcagggtgg aaatgtgacc aaaccaacgg 120
taattatcag tcaagaagga gacaaagtgg tcattcaggac tctcagcaca ttcaagaaca 180
cggagattag tttccagctg ggagaagagt ttgatgaaac cactgcagat gatagaaact 240
gtaagtctgt tgtagcctg gatggagaca aacttggca catacagaaa tggatggca 300
aagaaacaaa tttttaaga gaaattaagg atggcaaaat ggttatgacc cttactttg 360
gtgatgtggc tgctgttcac cactatgaga aggcataaaa atgt 404

<210> 51
<211> 130
<212> PRT
<213> Homo sapiens

<400> 51
Glu Ala Phe Cys Asn Thr Trp Lys Leu Thr Asp Gln Asn Phe Asp Glu
1 5 10 15

Tyr Met Lys Ala Leu Gly Met Gly Phe Val Thr Arg Gln Val Gly Asn
20 25 30

Val Asp Lys Pro Arg Val Ile Ile Ser Gln Glu Asp Lys Val Val
35 40 45

Ile Arg Ile Gln Ser Met Phe Lys Asn Thr Glu Val Ser Phe His Leu
50 55 60

Gly Glu Glu Phe Asp Glu Thr Thr Asp Asp Arg Asn Cys Lys Phe
65 70 75 80

Val Val Ser Leu Asp Arg Asp Lys Leu Ile His Ile Gln Lys Trp Asp
85 90 95

Asp Lys Glu Thr Tyr Phe Ile Arg Glu Ile Lys Tyr Gly Glu Met Val
100 105 110

Met Thr Phe Thr Phe Gly Asp Asp Val Val Ala Val His His Tyr Lys
115 120 125

Lys Ala
130

<210> 52
<211> 130
<212> PRT
<213> Homo sapiens

<400> 52
Glu Ala Phe Cys Ala Thr Trp Lys Leu Thr Asn Ser Gln Asn Phe Asp
1 5 10 15

Glu Tyr Met Lys Ala Leu Gly Val Gly Phe Ala Thr Arg Gln Val Gly
20 25 30

Asn Val Thr Lys Pro Thr Val Ile Ile Ser Gln Glu Gly Asp Lys Val
35 40 45

Val Ile Arg Thr Leu Ser Thr Phe Lys Asn Thr Glu Ile Ser Phe Gln
50 55 60

Leu Gly Glu Glu Phe Asp Glu Thr Thr Ala Asp Asp Arg Asn Cys Lys
65 70 75 80

Ser Val Val Ser Leu Asp Gly Asp Lys Leu Val His Ile Gln Lys Trp
85 90 95

Asp Gly Lys Glu Thr Asn Phe Val Arg Glu Ile Lys Asp Gly Lys Met
100 105 110

Val Met Thr Leu Thr Phe Gly Asp Val Val Ala Val Arg His Tyr Glu
115 120 125

Lys Ala
130

<210> 53
<211> 130
<212> PRT
<213> Homo sapiens

<400> 53

Glu Ala Phe Cys Asn Thr Trp Lys Leu Thr Asp Gln Asn Phe Asp Glu
1 5 10 15

Tyr Met Lys Ala Leu Gly Met Gly Phe Val Thr Arg Gln Val Gly Asn
20 25 30

Val Asp Lys Pro Arg Val Ile Ile Ser Gln Glu Glu Asp Lys Val Val
35 40 45

Ile Arg Ile Gln Ser Met Phe Lys Asn Thr Glu Val Ser Phe His Leu
50 55 60

Gly Glu Glu Phe Asp Glu Thr Thr Asp Asp Arg Asn Cys Lys Phe
65 70 75 80

Val Val Ser Leu Asp Arg Asp Lys Leu Ile His Ile Gln Lys Trp Asp
85 90 95

Asp Lys Glu Thr Tyr Phe Ile Arg Glu Ile Lys Tyr Gly Glu Met Val
100 105 110

Met Thr Phe Thr Phe Gly Asp Asp Val Val Ala Val His His Tyr Lys
115 120 125

Lys Ala
130

<210> 54

<211> 130

<212> PRT

<213> Homo sapiens

<400> 54

Glu Ala Phe Cys Ala Thr Trp Lys Leu Thr Asn Ser Gln Asn Phe Asp
1 5 10 15

Glu Tyr Met Lys Ala Leu Gly Val Gly Phe Ala Thr Arg Gln Val Gly
20 25 30

Asn Val Thr Lys Pro Thr Val Ile Ile Ser Gln Glu Gly Asp Lys Val
35 40 45

Val Ile Arg Thr Leu Ser Thr Phe Lys Asn Thr Glu Ile Ser Phe Gln
50 55 60

Leu Gly Glu Glu Phe Asp Glu Thr Thr Ala Asp Asp Arg Asn Cys Lys
65 70 75 80

Ser Val Val Ser Leu Asp Gly Asp Lys Leu Val His Ile Gln Lys Trp
85 90 95

Asp Gly Lys Glu Thr Asn Phe Val Arg Glu Ile Lys Asp Gly Lys Met
100 105 110

Val Met Thr Leu Thr Phe Gly Asp Val Val Ala Val Arg His Tyr Glu
115 120 125

Lys Ala
130

<210> 55

<211> 132

<212> PRT

<213> Homo sapiens

<400> 55

Val Glu Glu Ala Phe Cys Asn Thr Trp Lys Leu Thr Asp Gln Asn Phe
1 5 10 15

Asp Glu Tyr Met Lys Ala Leu Gly Met Gly Phe Val Thr Arg Gln Val
20 25 30

Gly Asn Val Asp Lys Pro Arg Val Ile Ile Ser Gln Glu Asp Lys
35 40 45

Val Val Ile Arg Ile Gln Ser Met Phe Lys Asn Thr Glu Val Ser Phe
50 55 60

His Leu Gly Glu Glu Phe Asp Glu Thr Thr Asp Asp Arg Asn Cys
65 70 75 80

Lys Phe Val Val Ser Leu Asp Arg Asp Lys Leu Ile His Ile Gln Lys
85 90 95

Trp Asp Asp Lys Glu Thr Tyr Phe Ile Arg Glu Ile Lys Tyr Gly Glu
100 105 110

Met Val Met Thr Phe Thr Phe Gly Asp Asp Val Val Ala Val His His
115 120 125

Tyr Lys Lys Ala
130

<210> 56
<211> 132
<212> PRT
<213> Homo sapiens

<400> 56

Val	Glu	Glu	Ala	Phe	Cys	Asn	Thr	Trp	Lys	Leu	Thr	Asp	Gln	Asn	Phe
1															15
Asp	Glu	Tyr	Met	Lys	Ala	Leu	Gly	Met	Gly	Phe	Val	Thr	Arg	Gln	Val
			20					25							30
Gly	Asn	Val	Asp	Lys	Pro	Arg	Val	Ile	Ile	Ser	Gln	Glu	Glu	Asp	Lys
			35					40							45
Val	Val	Ile	Arg	Ile	Gln	Ser	Met	Phe	Lys	Asn	Thr	Glu	Val	Ser	Phe
			50				55								60
His	Leu	Gly	Glu	Glu	Phe	Asp	Glu	Thr	Thr	Asp	Asp	Arg	Asn	Cys	
			65				70			75					80
Lys	Phe	Val	Val	Ser	Leu	Asp	Arg	Asp	Lys	Leu	Ile	His	Ile	Gln	Lys
			85				90								95
Trp	Asp	Asp	Lys	Glu	Thr	Tyr	Phe	Ile	Arg	Glu	Ile	Lys	Tyr	Gly	Glu
			100				105								110
Met	Val	Met	Thr	Phe	Thr	Phe	Gly	Asp	Asp	Val	Val	Ala	Val	His	His
			115				120								125
Tyr	Lys	Lys	Ala												
			130												

<210> 57
<211> 272
<212> PRT
<213> Homo sapiens

<400> 57

Ala	Cys	Gly	Leu	Gly	Phe	Val	Pro	Val	Val	Tyr	Tyr	Ser	Leu	Leu	Leu
1															15
Cys	Leu	Gly	Leu	Pro	Ala	Asn	Ile	Leu	Thr	Val	Ile	Ile	Leu	Ser	Gln
							20			25					30

Leu Val Ala Arg Arg Gln Lys Ser Ser Tyr Asn Tyr	Leu Leu Ala Leu		
35	40	45	
Ala Ala Ala Asp Ile Leu Val Leu Phe Phe Ile Val	Phe Val Asp Phe		
50	55	60	
Leu Leu Glu Asp Phe Ile Leu Asn Met Gln Met Pro	Gln Val Pro Asp		
65	70	75	80
Lys Ile Ile Glu Val Leu Glu Phe Ser Ser Ile His	Thr Ser Ile Trp		
85	90	95	
Ile Thr Val Pro Leu Thr Ile Asp Arg Tyr Ile Ala	Val Cys His Pro		
100	105	110	
Leu Lys Tyr His Thr Val Ser Tyr Pro Ala Arg Thr	Arg Lys Val Ile		
115	120	125	
Val Ser Val Tyr Ile Thr Cys Phe Leu Thr Ser Ile	Pro Tyr Tyr Trp		
130	135	140	
Trp Pro Asn Ile Trp Thr Glu Asp Tyr Ile Ser Thr	Ser Val His His		
145	150	155	160
Val Leu Ile Trp Ile His Cys Phe Thr Val Tyr	Leu Val Pro Cys Ser		
165	170	175	
Ile Phe Phe Ile Leu Asn Ser Ile Ile Val Tyr Lys	Leu Arg Arg Lys		
180	185	190	
Ser Asn Phe Arg Leu Arg Gly Tyr Ser Thr Gly Lys	Thr Thr Ala Ile		
195	200	205	
Leu Phe Thr Ile Thr Ser Ile Phe Ala Thr Leu Trp	Ala Pro Arg Ile		
210	215	220	
Ile Met Ile Leu Tyr His Leu Tyr Gly Ala Pro Ile	Gln Asn Arg Trp		
225	230	235	240
Leu Val His Ile Met Ser Asp Ile Ala Asn Met Leu	Ala Leu Asn		
245	250	255	
Thr Ala Ile Asn Phe Phe Leu Tyr Cys Phe Ile Ser	Lys Arg Phe Arg		
260	265	270	

<210> 58
<211> 272
<212> PRT
<213> Homo sapiens

<400> 58
Ala Cys Gly Leu Gly Phe Val Pro Val Val Tyr Tyr Ser Leu Leu Leu
1 5 10 15

Cys Leu Gly Leu Pro Ala Asn Ile Leu Thr Val Ile Ile Leu Ser Gln
20 25 30

Leu Val Ala Arg Arg Gln Lys Ser Ser Tyr Asn Tyr Leu Leu Ala Leu
35 40 45

Ala Ala Ala Asp Ile Leu Val Leu Phe Phe Ile Val Phe Val Asp Phe
50 55 60

Leu Leu Glu Asp Phe Ile Leu Asn Met Gln Met Pro Gln Val Pro Asp
65 70 75 80

Lys Ile Ile Glu Val Leu Glu Phe Ser Ser Ile His Thr Ser Ile Trp
85 90 95

Ile Thr Val Pro Leu Thr Ile Asp Arg Tyr Ile Ala Val Cys His Pro
100 105 110

Leu Lys Tyr His Thr Val Ser Tyr Pro Ala Arg Thr Arg Lys Val Ile
115 120 125

Val Ser Val Tyr Ile Thr Cys Phe Leu Thr Ser Ile Pro Tyr Tyr Trp
130 135 140

Trp Pro Asn Ile Trp Thr Glu Asp Tyr Ile Ser Thr Ser Val His His
145 150 155 160

Val Leu Ile Trp Ile His Cys Phe Thr Val Tyr Leu Val Pro Cys Ser
165 170 175

Ile Phe Phe Ile Leu Asn Ser Ile Ile Val Tyr Lys Leu Arg Arg Lys
180 185 190

Ser Asn Phe Arg Leu Arg Gly Tyr Ser Thr Gly Lys Thr Thr Ala Ile
195 200 205

Leu Phe Thr Ile Thr Ser Ile Phe Ala Thr Leu Trp Ala Pro Arg Ile
210 215 220

Ile Met Ile Leu Tyr His Leu Tyr Gly Ala Pro Ile Gln Asn Arg Trp
225 230 235 240

Leu Val His Ile Met Ser Asp Ile Ala Asn Met Leu Ala Leu Leu Asn
245 250 255

Thr Ala Ile Asn Phe Phe Leu Tyr Cys Phe Ile Ser Lys Arg Phe Arg
260 265 270

<210> 59
<211> 350
<212> PRT
<213> Homo sapiens

<400> 59
Met Glu His Thr His Ala His Leu Ala Ala Asn Ser Ser Leu Ser Trp
1 5 10 15

Trp Ser Pro Gly Ser Ala Cys Gly Leu Gly Phe Val Pro Val Val Tyr
20 25 30

Tyr Ser Leu Leu Leu Cys Leu Gly Leu Pro Ala Asn Ile Leu Thr Val
35 40 45

Ile Ile Leu Ser Gln Leu Val Ala Arg Arg Gln Lys Ser Ser Tyr Asn
50 55 60

Tyr Leu Leu Ala Leu Ala Ala Asp Ile Leu Val Leu Phe Phe Ile
65 70 75 80

Val Phe Val Asp Phe Leu Leu Glu Asp Phe Ile Leu Asn Met Gln Met
85 90 95

Pro Gln Val Pro Asp Lys Ile Ile Glu Val Leu Glu Phe Ser Ser Ile
100 105 110

His Thr Ser Ile Trp Ile Thr Val Pro Leu Thr Ile Asp Arg Tyr Ile
115 120 125

Thr Val Cys His Pro Leu Lys Tyr His Thr Val Ser Tyr Pro Ala Arg
130 135 140

Thr Arg Lys Val Ile Val Ser Val Tyr Ile Thr Cys Phe Leu Thr Ser

145	150	155	160
Ile Pro Tyr Tyr Trp Trp Pro Asn Ile Trp Thr Glu Asp Tyr Ile Ser			
165	170	175	
Thr Ser Val His His Val Leu Ile Trp Ile His Cys Phe Thr Val Tyr			
180	185	190	
Leu Val Pro Cys Ser Ile Phe Phe Ile Leu Asn Ser Ile Ile Val Tyr			
195	200	205	
Lys Leu Arg Arg Lys Ser Asn Phe Arg Leu Arg Gly Tyr Ser Thr Gly			
210	215	220	
Lys Thr Thr Ala Ile Leu Phe Thr Ile Thr Ser Ile Phe Ala Thr Leu			
225	230	235	240
Trp Ala Pro Arg Ile Ile Met Ile Leu Tyr His Leu Tyr Gly Ala Pro			
245	250	255	
Ile Gln Asn Arg Trp Leu Val His Ile Met Ser Asp Ile Ala Asn Met			
260	265	270	
Leu Ala Leu Leu Asn Thr Ala Ile Asn Phe Phe Leu Tyr Cys Phe Ile			
275	280	285	
Ser Lys Arg Phe Arg Thr Met Ala Ala Ala Thr Leu Lys Ala Phe Phe			
290	295	300	
Lys Cys Gln Lys Gln Pro Val Gln Phe Tyr Thr Asn His Asn Phe Ser			
305	310	315	320
Ile Thr Ser Ser Pro Trp Ile Ser Pro Ala Asn Ser His Cys Ile Lys			
325	330	335	
Met Leu Val Tyr Gln Tyr Asp Lys Asn Gly Lys Pro Ile Lys			
340	345	350	
<210> 60			
<211> 350			
<212> PRT			
<213> Homo sapiens			
<400> 60			
Met Glu His Thr His Ala His Leu Ala Ala Asn Ser Ser Leu Ser Trp			
1	5	10	15

Trp	Ser	Pro	Gly	Ser	Ala	Cys	Gly	Leu	Gly	Phe	Val	Pro	Val	Val	Tyr
20								25						30	
Tyr	Ser	Leu	Leu	Leu	Cys	Leu	Gly	Leu	Pro	Ala	Asn	Ile	Leu	Thr	Val
35								40						45	
Ile	Ile	Leu	Ser	Gln	Leu	Val	Ala	Arg	Arg	Gln	Lys	Ser	Ser	Tyr	Asn
50								55				60			
Tyr	Leu	Leu	Ala	Leu	Ala	Ala	Asp	Ile	Leu	Val	Leu	Phe	Phe	Ile	
65								70				75			80
Val	Phe	Val	Asp	Phe	Leu	Leu	Glu	Asp	Phe	Ile	Leu	Asn	Met	Gln	Met
85								90						95	
Pro	Gln	Val	Pro	Asp	Lys	Ile	Ile	Glu	Val	Leu	Glu	Phe	Ser	Ser	Ile
100								105						110	
His	Thr	Ser	Ile	Trp	Ile	Thr	Val	Pro	Leu	Thr	Ile	Asp	Arg	Tyr	Ile
115								120						125	
Ala	Val	Cys	His	Pro	Leu	Lys	Tyr	His	Thr	Val	Ser	Tyr	Pro	Ala	Arg
130								135						140	
Thr	Arg	Lys	Val	Ile	Val	Ser	Val	Tyr	Ile	Thr	Cys	Phe	Leu	Thr	Ser
145								150				155			160
Ile	Pro	Tyr	Tyr	Trp	Trp	Pro	Asn	Ile	Trp	Thr	Glu	Asp	Tyr	Ile	Ser
165								170						175	
Thr	Ser	Val	His	Val	Leu	Ile	Trp	Ile	His	Cys	Phe	Thr	Val	Tyr	
180								185						190	
Leu	Val	Pro	Cys	Ser	Ile	Phe	Phe	Ile	Leu	Asn	Ser	Ile	Ile	Val	Tyr
195								200						205	
Lys	Leu	Arg	Arg	Lys	Ser	Asn	Phe	Arg	Leu	Arg	Gly	Tyr	Ser	Thr	Gly
210								215				220			
Lys	Thr	Thr	Ala	Ile	Leu	Phe	Thr	Ile	Thr	Ser	Ile	Phe	Ala	Thr	Leu
225								230				235			240
Trp	Ala	Pro	Arg	Ile	Ile	Met	Ile	Leu	Tyr	His	Leu	Tyr	Gly	Ala	Pro
245								250						255	
Ile	Gln	Asn	Arg	Trp	Leu	Val	His	Ile	Met	Ser	Asp	Ile	Ala	Asn	Met
260								265						270	

Leu Ala Leu Leu Asn Thr Ala Ile Asn Phe Phe Leu Tyr Cys Phe Ile
275 280 285

Ser Lys Arg Phe Arg Thr Met Ala Ala Ala Thr Leu Lys Ala Phe Phe
290 295 300

Lys Cys Gln Lys Gln Pro Val Gln Phe Tyr Thr Asn His Asn Phe Ser
305 310 315 320

Ile Thr Ser Ser Pro Trp Ile Ser Pro Ala Asn Ser His Cys Ile Lys
325 330 335

Met Leu Val Tyr Gln Tyr Asp Lys Asn Gly Lys Pro Ile Lys
340 345 350

<210> 61

<211> 657

<212> PRT

<213> Homo sapiens

<400> 61

Lys His Ser Asn Lys Lys Val Met Arg Thr Lys Ser Ser Glu Lys Ala
1 5 10 15

Ala Asn Asp Asp His Ser Val Arg Val Ala Arg Glu Asp Val Arg Glu
20 25 30

Ser Cys Pro Pro Leu Gly Leu Glu Thr Leu Lys Ile Thr Asp Phe Gln
35 40 45

Leu His Ala Ser Thr Val Lys Arg Tyr Gly Leu Gly Ala His Arg Gly
50 55 60

Arg Leu Asn Ile Gln Ala Gly Ile Asn Glu Asn Asp Phe Tyr Asp Gly
65 70 75 80

Ala Trp Cys Ala Gly Arg Asn Asp Leu Gln Gln Trp Ile Glu Val Asp
85 90 95

Ala Arg Arg Leu Thr Arg Phe Thr Gly Val Ile Thr Gln Gly Arg Asn
100 105 110

Ser Leu Trp Leu Ser Asp Trp Val Thr Ser Tyr Lys Val Met Val Ser
115 120 125

Asn Asp Ser His Thr Trp Val Thr Val Lys Asn Gly Ser Gly Asp Met
130 135 140

Ile Phe Glu Gly Asn Ser Glu Lys Glu Ile Pro Val Leu Asn Glu Leu
145 150 155 160

Pro Val Pro Met Val Ala Arg Tyr Ile Arg Ile Asn Pro Gln Ser Trp
165 170 175

Phe Asp Asn Gly Ser Ile Cys Met Arg Met Glu Ile Leu Gly Cys Pro
180 185 190

Leu Pro Asp Pro Asn Asn Tyr Tyr His Arg Arg Asn Glu Met Thr Thr
195 200 205

Thr Asp Asp Leu Asp Phe Lys His His Asn Tyr Lys Glu Met Arg Gln
210 215 220

Val Gln Leu Met Lys Val Val Asn Glu Met Cys Pro Asn Ile Thr Arg
225 230 235 240

Ile Tyr Asn Ile Gly Lys Ser His Gln Gly Leu Lys Leu Tyr Ala Val
245 250 255

Glu Ile Ser Asp His Pro Gly Glu His Glu Val Gly Glu Pro Glu Phe
260 265 270

His Tyr Ile Ala Gly Ala His Gly Asn Glu Val Leu Gly Arg Glu Leu
275 280 285

Leu Leu Leu Val Gln Phe Val Cys Gln Glu Tyr Leu Ala Arg Asn
290 295 300

Ala Arg Ile Val His Leu Val Glu Glu Thr Arg Ile His Val Leu Pro
305 310 315 320

Ser Leu Asn Pro Asp Gly Tyr Glu Lys Ala Tyr Glu Gly Gly Ser Glu
325 330 335

Leu Gly Gly Trp Ser Leu Gly Arg Trp Thr His Asp Gly Ile Asp Ile
340 345 350

Asn Asn Asn Phe Pro Asp Leu Asn Thr Leu Leu Trp Glu Ala Glu Asp
355 360 365

Arg Gln Asn Val Pro Arg Lys Val Pro Asn His Tyr Ile Ala Ile Pro
370 375 380

Glu Trp Phe Leu Ser Glu Asn Ala Thr Val Val Ala Ala Glu Thr Arg
385 390 395 400

Ala Val Ile Ala Trp Met Glu Lys Ile Pro Phe Val Leu Gly Gly Asn
405 410 415

Leu Gln Gly Gly Glu Leu Val Val Ala Tyr Pro Tyr Asp Leu Val Arg
420 425 430

Ser Pro Trp Lys Thr Gln Glu His Thr Pro Thr Pro Asp Asp His Val
435 440 445

Phe Arg Trp Leu Ala Tyr Ser Tyr Ala Ser Thr His Arg Leu Met Thr
450 455 460

Asp Ala Arg Arg Arg Val Cys His Thr Glu Asp Phe Gln Lys Glu Glu
465 470 475 480

Gly Thr Val Asn Gly Ala Ser Trp His Thr Val Ala Gly Ser Leu Asn
485 490 495

Asp Phe Ser Tyr Leu His Thr Asn Cys Phe Glu Leu Ser Ile Tyr Val
500 505 510

Gly Cys Asp Lys Tyr Pro His Glu Ser Gln Leu Pro Glu Glu Trp Glu
515 520 525

Asn Asn Arg Glu Ser Leu Ile Val Phe Met Glu Gln Val His Arg Gly
530 535 540

Ile Lys Gly Leu Val Arg Asp Ser His Gly Lys Gly Ile Pro Asn Ala
545 550 555 560

Ile Ile Ser Val Glu Gly Ile Asn His Asp Ile Arg Thr Ala Asn Asp
565 570 575

Gly Asp Tyr Trp Arg Leu Leu Asn Pro Gly Glu Tyr Val Val Thr Ala
580 585 590

Lys Ala Glu Gly Phe Thr Ala Ser Thr Lys Asn Cys Met Val Gly Tyr
595 600 605

Asp Met Gly Ala Thr Arg Cys Asp Phe Thr Leu Ser Lys Thr Asn Met
610 615 620

Ala Arg Ile Arg Glu Ile Met Glu Lys Phe Gly Lys Gln Pro Val Ser
625 630 635 640

Leu Pro Ala Arg Arg Leu Lys Leu Arg Gly Arg Lys Arg Arg Gln Arg
645 650 655

Gly

<210> 62

<211> 654

<212> PRT

<213> Homo sapiens

<400> 62

Lys His Ser Asn Lys Lys Val Met Arg Thr Lys Ser Ser Glu Lys Ala
1 5 10 15

Ala Asn Asp Asp His Ser Val Arg Val Ala Arg Glu Asp Val Arg Glu
20 25 30

Ser Cys Pro Pro Leu Gly Leu Glu Thr Leu Lys Ile Thr Asp Phe Gln
35 40 45

Leu His Ala Ser Thr Val Lys Arg Tyr Gly Leu Gly Ala His Arg Gly
50 55 60

Arg Leu Asn Ile Gln Ala Gly Ile Asn Glu Asn Asp Phe Tyr Asp Gly
65 70 75 80

Ala Trp Cys Ala Gly Arg Asn Asp Leu Gln Gln Trp Ile Glu Val Asp
85 90 95

Ala Arg Arg Leu Thr Arg Phe Thr Gly Val Ile Thr Gln Gly Arg Asn
100 105 110

Ser Leu Trp Leu Ser Asp Trp Val Thr Ser Tyr Lys Val Met Val Ser
115 120 125

Asn Asp Ser His Thr Trp Val Thr Val Lys Asn Gly Ser Gly Asp Met
130 135 140

Ile Phe Glu Gly Asn Ser Glu Lys Glu Ile Pro Val Leu Asn Glu Leu
145 150 155 160

Pro Val Pro Met Val Ala Arg Tyr Ile Arg Ile Asn Pro Gln Ser Trp
165 170 175

Phe Asp Asn Gly Ser Ile Cys Met Arg Met Glu Ile Leu Gly Cys Pro
180 185 190

Leu Pro Asp Pro Asn Asn Tyr Tyr His Arg Arg Asn Glu Met Thr Thr

195 200 205
Thr Asp Asp Leu Asp Phe Lys His His Asn Tyr Lys Glu Met Arg Gln
210 215 220

Leu Met Lys Val Val Asn Glu Met Cys Pro Asn Ile Thr Arg Ile Tyr
225 230 235 240

Asn Ile Gly Lys Ser His Gln Gly Leu Lys Leu Tyr Ala Val Glu Ile
245 250 255

Ser Asp His Pro Gly Glu His Glu Val Gly Glu Pro Glu Phe His Tyr
260 265 270

Ile Ala Gly Ala His Gly Asn Glu Val Leu Gly Arg Glu Leu Leu Leu
275 280 285

Leu Leu Val Gln Phe Val Cys Gln Glu Tyr Leu Ala Arg Asn Ala Arg
290 295 300

Ile Val His Leu Val Glu Glu Thr Arg Ile His Val Leu Pro Ser Leu
305 310 315 320

Asn Pro Asp Gly Tyr Glu Lys Ala Tyr Glu Gly Gly Ser Glu Leu Gly
325 330 335

Gly Trp Ser Leu Gly Arg Trp Thr His Asp Gly Ile Asp Ile Asn Asn
340 345 350

Asn Phe Pro Asp Leu Asn Thr Leu Leu Trp Glu Ala Glu Asp Arg Gln
355 360 365

Asn Val Pro Arg Lys Val Pro Asn His Tyr Ile Ala Ile Pro Glu Trp
370 375 380

Phe Leu Ser Glu Asn Ala Thr Val Ala Ala Glu Thr Arg Ala Val Ile
385 390 395 400

Ala Trp Met Glu Lys Ile Pro Phe Val Leu Gly Gly Asn Leu Gln Gly
405 410 415

Gly Glu Leu Val Val Ala Tyr Pro Tyr Asp Leu Val Arg Ser Pro Trp
420 425 430

Lys Thr Gln Glu His Thr Pro Thr Pro Asp Asp His Val Phe Arg Trp
435 440 445

Leu Ala Tyr Ser Tyr Ala Ser Thr His Arg Leu Met Thr Asp Ala Arg

450	455	460
Arg Arg Val Cys His Thr Glu Asp Phe Gln Lys Glu Glu Gly Thr Val		
465	470	475
Asn Gly Ala Ser Trp His Thr Val Ala Gly Ser Leu Asn Asp Phe Ser		
485	490	495
Tyr Leu His Thr Asn Cys Phe Glu Leu Ser Ile Tyr Val Gly Cys Asp		
500	505	510
Lys Tyr Pro His Glu Ser Gln Leu Pro Glu Glu Trp Glu Asn Asn Arg		
515	520	525
Glu Ser Leu Ile Val Phe Met Glu Gln Val His Arg Gly Ile Lys Gly		
530	535	540
Leu Val Arg Asp Ser His Gly Lys Gly Ile Pro Asn Ala Ile Ile Ser		
545	550	555
Val Glu Gly Ile Asn His Asp Ile Arg Thr Ala Asn Asp Gly Asp Tyr		
565	570	575
Trp Arg Leu Leu Asn Pro Gly Glu Tyr Val Val Thr Ala Lys Ala Glu		
580	585	590
Gly Phe Thr Ala Ser Thr Lys Asn Cys Met Val Gly Tyr Asp Met Gly		
595	600	605
Ala Thr Arg Cys Asp Phe Thr Leu Ser Lys Thr Asn Met Ala Arg Ile		
610	615	620
Arg Glu Ile Met Glu Lys Phe Gly Lys Gln Pro Val Ser Leu Pro Ala		
625	630	635
Arg Arg Leu Lys Leu Arg Gly Arg Lys Arg Arg Gln Arg Gly		
645	650	

<210> 63
 <211> 509
 <212> PRT
 <213> Homo sapiens

<400> 63
 Asn Ser Glu Lys Glu Ile Pro Val Leu Asn Glu Leu Pro Val Pro Met
 1 5 10 15

Val Ala Arg Tyr Ile Arg Ile Asn Pro Gln Ser Trp Phe Asp Asn Gly
20 25 30

Ser Ile Cys Met Arg Met Glu Ile Leu Gly Cys Pro Leu Pro Asp Pro
35 40 45

Asn Asn Tyr Tyr His Arg Arg Asn Glu Met Thr Thr Thr Asp Asp Leu
50 55 60

Asp Phe Lys His His Asn Tyr Lys Glu Met Arg Gln Val Gln Leu Met
65 70 75 80

Lys Val Val Asn Glu Met Cys Pro Asn Ile Thr Arg Ile Tyr Asn Ile
85 90 95

Gly Lys Ser His Gln Gly Leu Lys Leu Tyr Ala Val Glu Ile Ser Asp
100 105 110

His Pro Gly Glu His Glu Val Gly Glu Pro Glu Phe His Tyr Ile Ala
115 120 125

Gly Ala His Gly Asn Glu Val Leu Gly Arg Glu Leu Leu Leu Leu
130 135 140

Val Gln Phe Val Cys Gln Glu Tyr Leu Ala Arg Asn Ala Arg Ile Val
145 150 155 160

His Leu Val Glu Glu Thr Arg Ile His Val Leu Pro Ser Leu Asn Pro
165 170 175

Asp Gly Tyr Glu Lys Ala Tyr Glu Gly Ser Glu Leu Gly Gly Trp
180 185 190

Ser Leu Gly Arg Trp Thr His Asp Gly Ile Asp Ile Asn Asn Asn Phe
195 200 205

Pro Asp Leu Asn Thr Leu Leu Trp Glu Ala Glu Asp Arg Gln Asn Val
210 215 220

Pro Arg Lys Val Pro Asn His Tyr Ile Ala Ile Pro Glu Trp Phe Leu
225 230 235 240

Ser Glu Asn Ala Thr Val Val Ala Ala Glu Thr Arg Ala Val Ile Ala
245 250 255

Trp Met Glu Lys Ile Pro Phe Val Leu Gly Gly Asn Leu Gln Gly Gly
260 265 270

Glu Leu Val Val Ala Tyr Pro Tyr Asp Leu Val Arg Ser Pro Trp Lys
275 280 285

Thr Gln Glu His Thr Pro Thr Pro Asp Asp His Val Phe Arg Trp Leu
290 295 300

Ala Tyr Ser Tyr Ala Ser Thr His Arg Leu Met Thr Asp Ala Arg Arg
305 310 315 320

Arg Val Cys His Thr Glu Asp Phe Gln Lys Glu Glu Gly Thr Val Asn
325 330 335

Gly Ala Ser Trp His Thr Val Ala Gly Ser Leu Asn Asp Phe Ser Tyr
340 345 350

Leu His Thr Asn Cys Phe Glu Leu Ser Ile Tyr Val Gly Cys Asp Lys
355 360 365

Tyr Pro His Glu Ser Gln Leu Pro Glu Glu Trp Glu Asn Asn Arg Glu
370 375 380

Ser Leu Ile Val Phe Met Glu Gln Val His Arg Gly Ile Lys Gly Leu
385 390 395 400

Val Arg Asp Ser His Gly Lys Gly Ile Pro Asn Ala Ile Ile Ser Val
405 410 415

Glu Gly Ile Asn His Asp Ile Arg Thr Ala Asn Asp Gly Asp Tyr Trp
420 425 430

Arg Leu Leu Asn Pro Gly Glu Tyr Val Val Thr Ala Lys Ala Glu Gly
435 440 445

Phe Thr Ala Ser Thr Lys Asn Cys Met Val Gly Tyr Asp Met Gly Ala
450 455 460

Thr Arg Cys Asp Phe Thr Leu Ser Lys Thr Asn Met Ala Arg Ile Arg
465 470 475 480

Glu Ile Met Glu Lys Phe Gly Lys Gln Pro Val Ser Leu Pro Ala Arg
485 490 495

Arg Leu Lys Leu Arg Gly Arg Lys Arg Arg Gln Arg Gly
500 505

<210> 64
<211> 506

<212> PRT

<213> Homo sapiens

<400> 64

Asn Ser Glu Lys Glu Ile Pro Val Leu Asn Glu Leu Pro Val Pro Met
1 5 10 15

Val Ala Arg Tyr Ile Arg Ile Asn Pro Gln Ser Trp Phe Asp Asn Gly
20 25 30

Ser Ile Cys Met Arg Met Glu Ile Leu Gly Cys Pro Leu Pro Asp Pro
35 40 45

Asn Asn Tyr Tyr His Arg Arg Asn Glu Met Thr Thr Thr Asp Asp Leu
50 55 60

Asp Phe Lys His His Asn Tyr Lys Glu Met Arg Gln Leu Met Lys Val
65 70 75 80

Val Asn Glu Met Cys Pro Asn Ile Thr Arg Ile Tyr Asn Ile Gly Lys
85 90 95

Ser His Gln Gly Leu Lys Leu Tyr Ala Val Glu Ile Ser Asp His Pro
100 105 110

Gly Glu His Glu Val Gly Glu Pro Glu Phe His Tyr Ile Ala Gly Ala
115 120 125

His Gly Asn Glu Val Leu Gly Arg Glu Leu Leu Leu Leu His
130 135 140

Phe Leu Cys Gln Glu Tyr Ser Ala Gln Asn Ala Arg Ile Val Arg Leu
145 150 155 160

Val Glu Glu Thr Arg Ile His Ile Leu Pro Ser Leu Asn Pro Asp Gly
165 170 175

Tyr Glu Lys Ala Tyr Glu Gly Gly Ser Glu Leu Gly Gly Trp Ser Leu
180 185 190

Gly Arg Trp Thr His Asp Gly Ile Asp Ile Asn Asn Asn Phe Pro Asp
195 200 205

Leu Asn Ser Leu Leu Trp Glu Ala Glu Asp Gln Gln Asn Ala Pro Arg
210 215 220

Lys Val Pro Asn His Tyr Ile Ala Ile Pro Glu Trp Phe Leu Ser Glu
225 230 235 240

Asn Ala Thr Val Ala Thr Glu Thr Arg Ala Val Ile Ala Trp Met Glu		
245	250	255
Lys Ile Pro Phe Val Leu Gly Gly Asn Leu Gln Gly Gly Glu Leu Val		
260	265	270
Val Ala Tyr Pro Tyr Asp Met Val Arg Ser Leu Trp Lys Thr Gln Glu		
275	280	285
His Thr Pro Thr Pro Asp Asp His Val Phe Arg Trp Leu Ala Tyr Ser		
290	295	300
Tyr Ala Ser Thr His Arg Leu Met Thr Asp Ala Arg Arg Arg Val Cys		
305	310	315
320		
His Thr Glu Asp Phe Gln Lys Glu Glu Gly Thr Val Asn Gly Ala Ser		
325	330	335
Trp His Thr Val Ala Gly Ser Leu Asn Asp Phe Ser Tyr Leu His Thr		
340	345	350
Asn Cys Phe Glu Leu Ser Ile Tyr Val Gly Cys Asp Lys Tyr Pro His		
355	360	365
Glu Ser Glu Leu Pro Glu Glu Trp Glu Asn Asn Arg Glu Ser Leu Ile		
370	375	380
Val Phe Met Glu Gln Val His Arg Gly Ile Lys Gly Ile Val Arg Asp		
385	390	395
400		
Leu Gln Gly Lys Gly Ile Ser Asn Ala Val Ile Ser Val Glu Gly Val		
405	410	415
Asn His Asp Ile Arg Thr Ala Ser Asp Gly Asp Tyr Trp Arg Leu Leu		
420	425	430
Asn Pro Gly Glu Tyr Val Val Thr Ala Lys Ala Glu Gly Phe Ile Thr		
435	440	445
Ser Thr Lys Asn Cys Met Val Gly Tyr Asp Met Gly Ala Thr Arg Cys		
450	455	460
Asp Phe Thr Leu Thr Lys Thr Asn Leu Ala Arg Ile Arg Glu Ile Met		
465	470	475
480		
Glu Thr Phe Gly Lys Gln Pro Val Ser Leu Pro Ser Arg Arg Leu Lys		
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Leu Arg Gly Arg Lys Arg Arg Gln Arg Gly
500 505

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